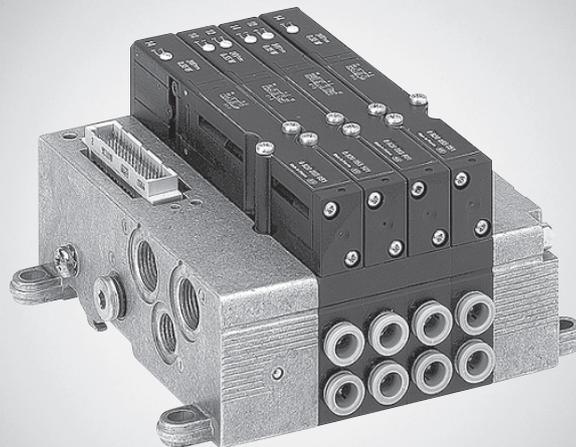


Valve terminal systems → Valve terminal systems
Series HF03

Brochure



Valve terminal systems → Valve terminal systems

* **Series HF03****Valve terminal systems**

Valve terminal system, Series HF03
 Qn max. = 700 l/min; multipole; Electr. connection: Plug connector according to DIN 41612/IEC 603-2 (form C/2)

4



Valve terminal system, Series HF03
 Qn max. = 700 l/min; direct field bus connection

7

Valves

2x3/2-way valve, Series HF03
 Qn = 700 l/min; plate connection; manual override: with detent

9



2x3/2-way valve, Series HF03
 Qn = 700 l/min; plate connection; manual override: without detent

11



5/2-way valve, Series HF03
 Qn = 700 l/min; plate connection; manual override: with detent

13



5/2-way valve, Series HF03
 Qn = 700 l/min; plate connection; manual override: without detent

15



5/3-way valve, Series HF03
 Qn = 700 l/min; plate connection; manual override: with detent

17



5/3-way valve, Series HF03
 Qn = 700 l/min; plate connection; manual override: without detent

19

Accessories

Plug connector according to DIN 41612/IEC 603-2 (form C/2)
 Socket, C/2

21



Plug connector according to DIN 41612/IEC 603-2 (form C/2)
 Socket, C/2

22



Plug connector according to DIN 41612/IEC 603-2 (form C/2)
 Socket, C/2; with cable

23



Plug connector according to DIN 41612/IEC 603-2 (form C/2)
 Socket, C/2; with cable

24



Plug connector according to DIN 41612/IEC 603-2 (form C/2)
 Socket, C/2; with cable

25

* Core products - preferably for new constructions, worldwide service

● Service products - existing standard program, worldwide service

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Valve terminal systems → Valve terminal systems

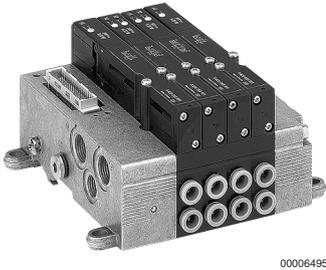
★ **Series HF03**

	Plug connector according to DIN 41612/IEC 603-2 (form C/2) Socket, C/2; with cable; suitable for dynamic laying	26
	Pressure regulator subplate	27
	CKD kit, for series HF03 compressed air connection output: Ø 8 - G 1/8; Single base plate principle	29
	CKD kit compressed air connection output: Ø 8 - G 1/8; Can be assembled into blocks; Single base plate principle; With collective pilot air exhaust	31
	Accessories, for series HF03	32

Valve terminal systems → Valve terminal systems

★ Valve terminal system, Series HF03

Qn max. = 700 l/min; multipole; Electr. connection: Plug connector according to DIN 41612/IEC 603-2 (form C/2)



00006495

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
Particle size max.	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Protection class according to EN 60529:2000, with Plug connector according to DIN 41612/IEC 603-2 (form C/2)	IP 65
Number of valve positions	32
Number of solenoid coils	32
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.

Configurable product

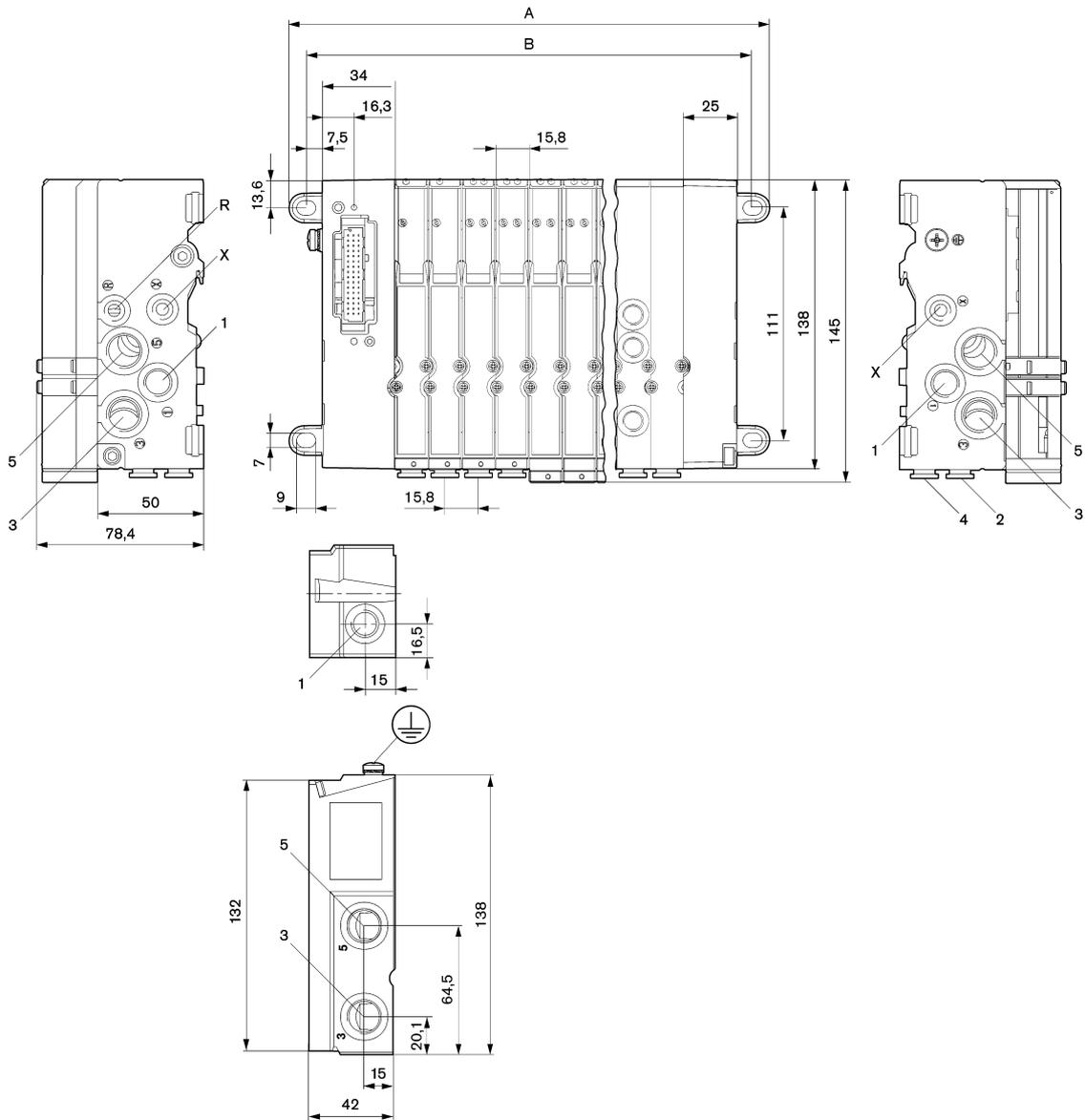
This product is configurable. Please use our configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal systems → Valve terminal systems

★ Valve terminal system, Series HF03

Qn max. = 700 l/min; multipole; Electr. connection: Plug connector according to DIN 41612/IEC 603-2 (form C/2)

Dimensions



00108817

End plate with plug connector as per DIN 41612/IEC603-2 (form C/2) or transition plate for CMS bus modules can be selected

1 = G1/4, 10 mm deep

2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8

3 and 5 = G3/8, 10 mm deep

R = G1/8, 8 mm deep

X = G1/8, 8 mm deep, 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
A	106	122	137	153	169	185	201	216	232	248	264	280	295	311
B	90	106	121	137	153	169	185	200	216	232	248	264	279	295

★ Core products - preferably for new constructions, worldwide service

● Service products - existing standard program, worldwide service

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Valve terminal systems → Valve terminal systems*** Valve terminal system, Series HF03****Qn max. = 700 l/min; multipole; Electr. connection: Plug connector according to DIN 41612/IEC 603-2 (form C/2)**

n	15	16	17	18	19	20	21	22	23	24	25	26	27	28
A	327	343	359	375	391	407	423	439	455	471	487	503	519	535
B	311	327	343	359	375	391	407	423	439	455	471	487	503	519
n	29	30	31	32										
A	551	567	583	599										
B	535	551	567	583										

n = number of subbases

Valve terminal systems → Valve terminal systems

★ Valve terminal system, Series HF03
 Qn max. = 700 l/min; direct field bus connection



00106353

Version	field bus
Bus module	V-design
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
Particle size max.	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Protection class according to EN 60529; 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.”

Configurable product



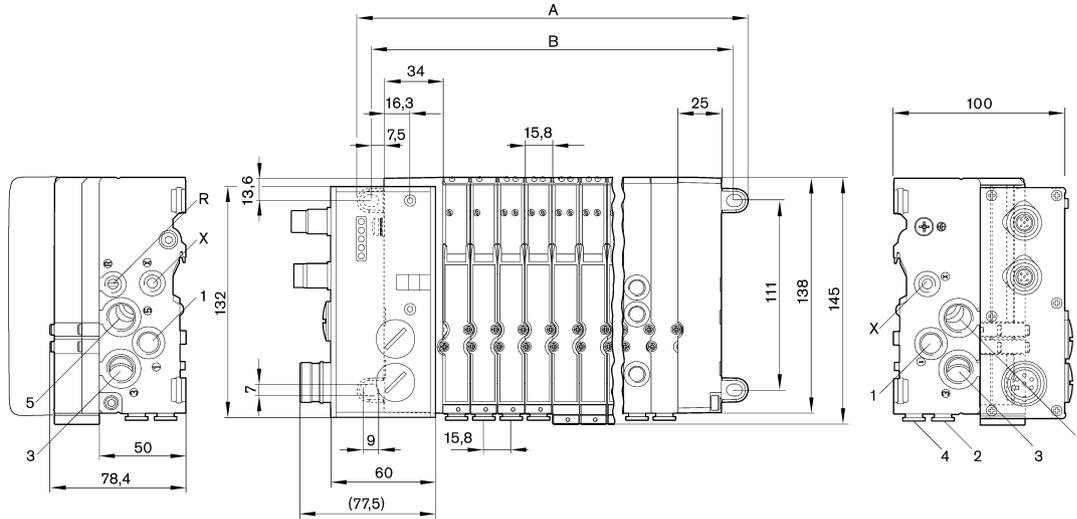
This product is configurable. Please use our configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal systems → Valve terminal systems

★ Valve terminal system, Series HF03

Qn max. = 700 l/min; direct field bus connection

Dimensions



End plate with plug connector as per DIN 41612/IEC603-2 (form C/2) or transition plate for CMS bus modules can be selected

1 = G1/4, 10 mm deep

2 and 4 = plug-in connection \varnothing 8 mm or threaded connection G1/8

3 and 5 = G3/8, 10 mm deep

R = G1/8, 8 mm deep

X = G1/8, 8 mm deep, 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
A	106	122	137	153	169	185	201	216	232	248	264	280	295	311
B	90	106	121	137	153	169	185	200	216	232	248	264	279	295
n	15	16	17	18	19	20	21	22	23	24	25	26	27	28
A	327	343	359	375	391	407	423	439	455	471	487	503	519	535
B	311	327	343	359	375	391	407	423	439	455	471	487	503	519
n	29	30	31	32										
A	551	567	583	599										
B	535	551	567	583										

n = number of subbases

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Valve terminal systems → Valve terminal systems

★ 2x3/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: with detent



00106356

Version	Spool valve, zero overlap
Pilot	external
Sealing principle	soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Protection class according to EN 60529:2000 with electrical connector/plug	IP 65
Protective circuit	Z-diodes short circuit protected
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
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“.

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

MO	Operating voltage	Flow conductance		Flow rate value	Control pressure min./max.	Weight	Part No.	
		DC	b	C				Qn
				[l/(s*bar)]				[l/min]
	24 V	0.22	178	700	2.5 / 10	0.082	0820055101	

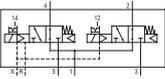
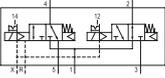
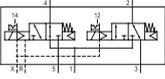
MO = Manual override
 With collective pilot air exhaust
 Nominal flow Qn at 6 bar and Δp = 1 bar

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 ● Service products - existing standard program, worldwide service
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Valve terminal systems → Valve terminal systems

★ 2x3/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: with detent

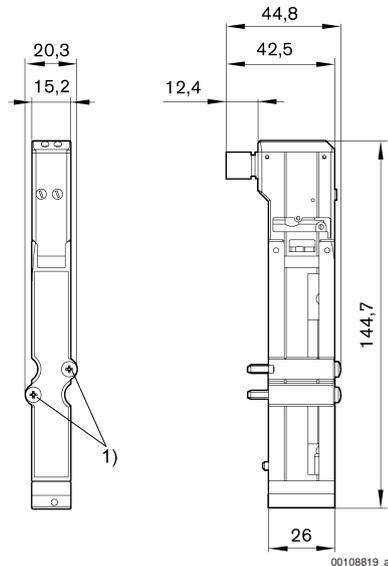
		MO	Operating voltage	Flow conductance		Flow rate value	Control pressure min./max.	Weight	Part No.
				DC	b				
							[l/(s*bar)]	[l/min]	[bar]
	NO/NO		24 V	0.22	178	700	2.5 / 10	0.082	0820055201
	NC/NO		24 V	0.22	178	700	2.5 / 10	0.082	0820055301
	NO/NC		24 V	0.22	178	700	2.5 / 10	0.082	0820055311

MO = Manual override

With collective pilot air exhaust

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Dimensions



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

Valve terminal systems → Valve terminal systems

★ 2x3/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: without detent



00106356

Version	Spool valve, zero overlap external
Pilot	external
Sealing principle	soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Protection class according to EN 60529:2000 with electrical connector/plug	IP 65
Protective circuit	Z-diodes short circuit protected
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
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“.

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

		MO	Operating voltage	Flow conductance		Flow rate value	Control pressure min./max.	Weight	Part No.	
				DC	b					C
					[l/(s*bar)]					[l/min]
	NC/NC		24 V	0.22	178	700	2.5 / 10	0.082	0820055102	

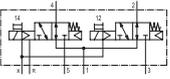
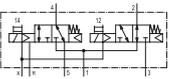
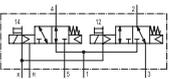
MO = Manual override
 With collective pilot air exhaust
 Nominal flow Qn at 6 bar and Δp = 1 bar

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Valve terminal systems → Valve terminal systems

★ 2x3/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: without detent

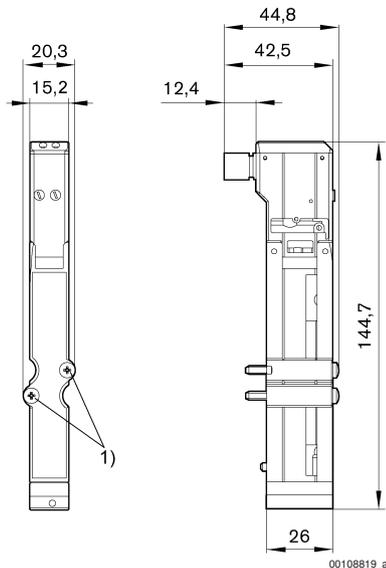
		MO	Operating voltage	Flow conductance		Flow rate value	Control pressure min./max.	Weight	Part No.	
				DC	b	C				Qn
										[l/(s*bar)]
	NO/NO		24 V	0.22	178	700	2.5 / 10	0.082	0820055202	
	NC/NO		24 V	0.22	178	700	2.5 / 10	0.082	0820055302	
	NO/NC		24 V	0.22	178	700	2.5 / 10	0.082	0820055312	

MO = Manual override

With collective pilot air exhaust

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Dimensions



00108819_a

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

Valve terminal systems → Valve terminal systems

★ 5/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: with detent



00106356

Version	Spool valve, zero overlap
Pilot	external
Sealing principle	soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Particle size max.	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Protection class according to EN 60529:2000 with electrical connector/plug	IP 65
Protective circuit	Z-diodes short circuit protected
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
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“.

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

	MO	Operating voltage	Flow conductance		Flow rate value	Control pressure min./max.	Switch-on time	Switch-off time	Weight	Part No.
			b	C						
		DC	[l/(s*bar)]	[l/min]	[bar]	[ms]	[ms]	[kg]		
		24 V	0.22	179	700	2.5 / 10	16	23	0.082	0820055051
		24 V	0.22	178	700	2.5 / 10	13	15	0.082	0820055501

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

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 - Service products - existing standard program, worldwide service
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Valve terminal systems → Valve terminal systems

★ 5/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: with detent

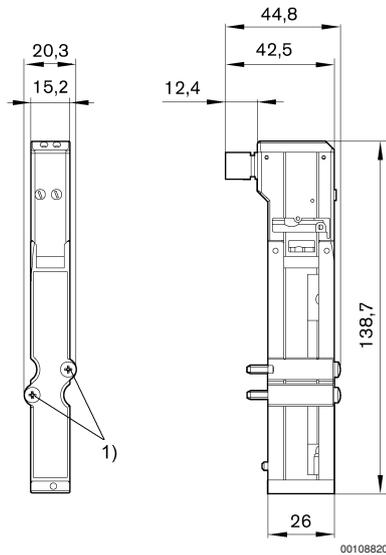
	MO	Operating voltage	Flow conductance		Flow rate value Qn	Control pressure min./max.	Switch-on time	Switch-off time	Weight	Part No.
			b	C						
		24 V	0.22	179	700	2.5 / 10	15	23	0.082	0820055001

MO = Manual override

With collective pilot air exhaust

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Dimensions

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

Valve terminal systems → Valve terminal systems

★ 5/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: without detent



00106356

Version	Spool valve, zero overlap
Pilot	external
Sealing principle	soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Particle size max.	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Protection class according to EN 60529:2000 with electrical connector/plug	IP 65
Protective circuit	Z-diodes short circuit protected
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
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“.

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

	MO	Operating voltage	Flow conductance		Flow rate value	Control pressure min./max.	Switch-on time	Switch-off time	Weight	Part No.
			b	C						
		DC	[l/(s*bar)]	[l/min]	[bar]	[ms]	[ms]	[kg]		
		24 V	0.22	179	700	2.5 / 10	16	23	0.082	0820055052

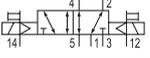
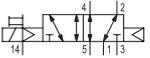
MO = Manual override
 With collective pilot air exhaust
 Nominal flow Qn at 6 bar and Δp = 1 bar

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 ● Service products - existing standard program, worldwide service
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Valve terminal systems → Valve terminal systems

★ 5/2-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: without detent

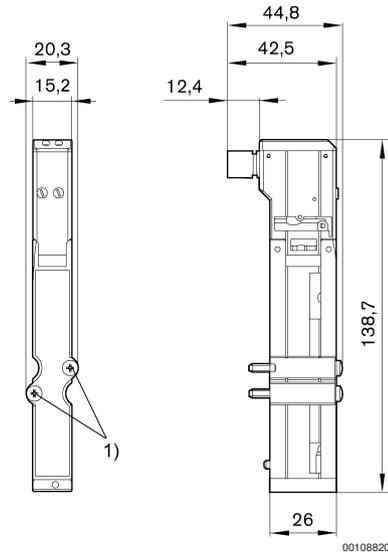
	MO	Operat- ing voltage	Flow conduc- tance		Flow rate value Qn	Control pressure min./max.	Switch-on time	Switch-off time	Weight	Part No.
			b	C						
		DC		[l/(s*bar)]	[l/min]	[bar]	[ms]	[ms]	[kg]	
		24 V	0.22	178	700	2.5 / 10	13	15	0.082	0820055502
		24 V	0.22	179	700	2.5 / 10	15	23	0.082	0820055002

MO = Manual override

With collective pilot air exhaust

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Dimensions



00108820

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

Valve terminal systems → Valve terminal systems

★ 5/3-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: with detent



00106356

Version	Spool valve, zero overlap
Pilot	external
Sealing principle	soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Particle size max.	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Protection class according to EN 60529:2000 with electrical connector/plug	IP 65
Protective circuit	Z-diodes short circuit protected
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
Seals	Acrylonitrile Butadiene Rubber; Polyurethane

Technical Remarks

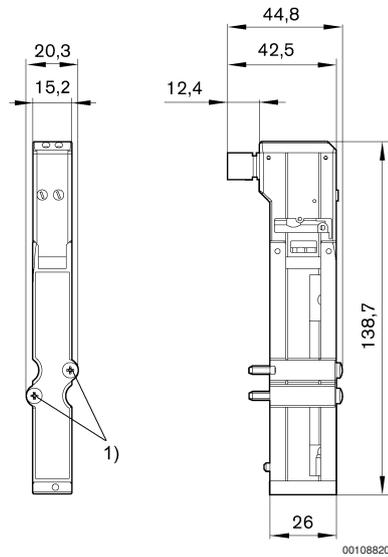
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

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

	MO	Operating voltage	Flow rate value	Control pressure min./max.	Weight	Part No.
		DC	Qn			
			[l/min]	[bar]	[kg]	
		24 V	700	2.5 / 10	0.082	0820055601

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

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Valve terminal systems → Valve terminal systems*** 5/3-way valve, Series HF03****Q_n = 700 l/min; plate connection; manual override: with detent****Dimensions**

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

Valve terminal systems → Valve terminal systems

★ 5/3-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: without detent



00106356

Version	Spool valve, zero overlap
Pilot	external
Sealing principle	soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Particle size max.	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Protection class according to EN 60529:2000 with electrical connector/plug	IP 65
Protective circuit	Z-diodes short circuit protected
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
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“.

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

	MO	Operating voltage	Flow rate value	Control pressure min./max.	Weight	Part No.
		DC	Qn			
			[l/min]	[bar]	[kg]	
		24 V	700	2.5 / 10	0.082	0820055602

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

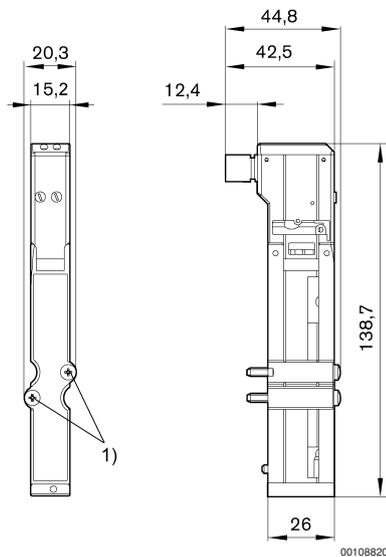
★ Core products - preferably for new constructions, worldwide service
 ● Service products - existing standard program, worldwide service
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Valve terminal systems → Valve terminal systems

★ 5/3-way valve, Series HF03

Qn = 700 l/min; plate connection; manual override: without detent

Dimensions



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

Valve terminal systems → Valve terminal systems

★ Series HF03
Accessories

★ Plug connector according to DIN 41612/IEC 603-2 (form C/2)
Socket, C/2



00109971_1

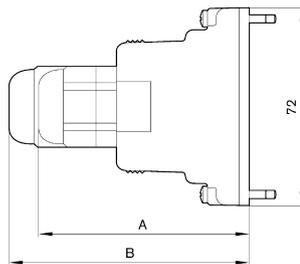
Protection class according to EN 60529: IP 65
 Cable fitting: PG 16
 Materials:
 Housing: Polyamide

Technical Remarks
 ■ The specified protection class is valid only in assembled and tested state.

Max. current [A]	Cable exit	Housing color	Weight [kg]	Note	Part No.
4	straight 180°	Black	0.069	1)	1824484060
			0.059	2)	1824484059
			0.071	3)	1824484061

- 1) max. 16 valve coils
- 2) max. 32 valve coils
- 3) max. 4 passive I/O modules

Dimensions



00108834

A = 70 mm, for cable Ø 9, B = 80 mm, for cable Ø 15.5

Valve terminal systems → Valve terminal systems

★ Series HF03

Accessories

★ Plug connector according to DIN 41612/IEC 603-2 (form C/2)

Socket, C/2



00109971_2

Protection class according to EN 60529: IP 65
 Cable fitting PG 16

Materials:
 Housing Plastic

Technical Remarks

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

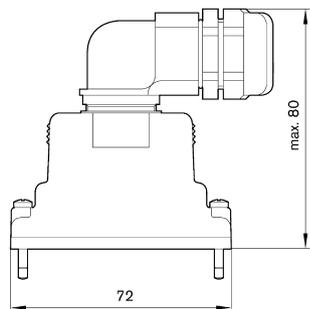
Max. current [A]	Cable exit	Housing color	Weight [kg]	Note	Part No.
4	angled 90°	Black	0.069	1)	1824484023
			0.06	2)	1824484024
			0.054	3)	1824484025

1) max. 16 valve coils

2) max. 32 valve coils

3) max. 4 passive I/O modules

Dimensions



00108835

Valve terminal systems → Valve terminal systems

★ Series HF03
Accessories

★ Plug connector according to DIN 41612/IEC 603-2 (form C/2)
Socket, C/2; with cable



Protection class according to EN 60529
Cable exit

IP 65
straight 180°

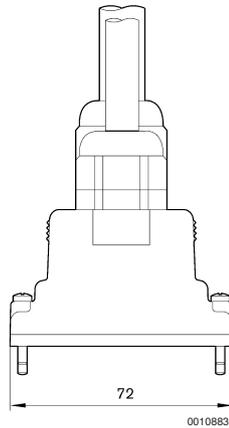
Technical Remarks

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

Number of wires	Cable length		Weight	Note	Part No.
		[m]			
25		5	1.09	1)	1824462004
		10	2.01		1824462007
		15	3.03		1824462010
40		5	1.522	2)	1824462005
		10	2.921	2)	1824462008
		15	4.516	2)	1824462011
		5	1.696	3)	1824462006
		10	2.923	3)	1824462009
		15	4.194	3)	1824462012

- 1) max. 16 valve coils
 - 2) max. 32 valve coils
 - 3) max. 4 passive I/O modules
- cable identification as per DIN 47100

Dimensions



Valve terminal systems → Valve terminal systems

★ Series HF03

Accessories

★ Plug connector according to DIN 41612/IEC 603-2 (form C/2)

Socket, C/2; with cable



00109972_1

Protection class according to EN 60529
Cable exit

IP 65
angled 90°

Technical Remarks

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

Number of wires	Cable length		Weight	Note	Part No.
		[m]			
25	5	1.054	1)	1824462013	
40	5	1.611	2)	1824462014	
		1.65	3)	1824462015	
25	10	1.986	1)	1824462016	
40	10	3.075	2)	1824462017	
		2.904	3)	1824462018	
25	15	3.04	1)	1824462019	
40	15	4.5	2)	1824462020	
		4.247	3)	1824462021	

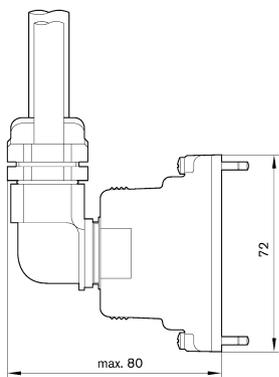
1) max. 16 valve coils

2) max. 32 valve coils

3) max. 4 passive I/O modules

cable identification as per DIN 47100

Dimensions



00108837

Valve terminal systems → Valve terminal systems

★ Series HF03
Accessories

★ Plug connector according to DIN 41612/IEC 603-2 (form C/2)
Socket, C/2; with cable



00112281

Protection class according to EN 60529
Cable exit

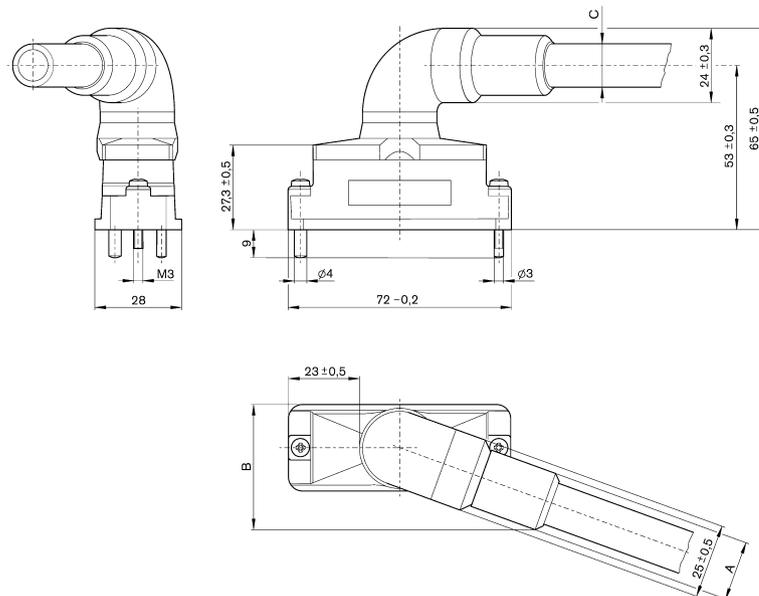
IP 65
angled 90°

Technical Remarks
■ The specified protection class is valid only in assembled and tested state.

Number of wires	Cable length		Weight	Note	Part No.
	[m]				
25	5		1.054	1)	1824462078
	8		1.611		1824462079
	10		1.054		1824462080
	15		1.611		1824462081
40	5		1.054	2)	1824462082
	8		1.611		1824462083
	10		1.054		1824462084
	15		1.611		1824462085

1) max. 16 valve coils
2) max. 32 valve coils
cable identification as per DIN 47100

Dimensions



00112377

★ Core products - preferably for new constructions, worldwide service
● Service products - existing standard program, worldwide service
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Valve terminal systems → Valve terminal systems

* Series HF03

Accessories

Part No.	A ±0,5	B -2,0	C ±0,2									
1824462078	17.3	40	11.2									
1824462079	17.3	40	11.2									
1824462080	17.3	40	11.2									
1824462081	17.3	40	11.2									
1824462082	19.3	41	13.5									
1824462083	19.3	41	13.5									
1824462084	19.3	41	13.5									
1824462085	19.3	41	13.5									

* Plug connector according to DIN 41612/IEC 603-2 (form C/2)

Socket, C/2; with cable; suitable for dynamic laying



00112281

Protection class according to EN 60529
Cable exit

IP 65
angled 90°

Technical Remarks

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

Number of wires	Cable length		Weight	Note	Part No.
		[m]			
25		5	1.054	1)	R412006726
36		5	1.611	2)	R412006729
25		10	1.054	1)	R412006727
36		10	1.611	2)	R412006730
		15			R412006731

1) max. 16 valve coils

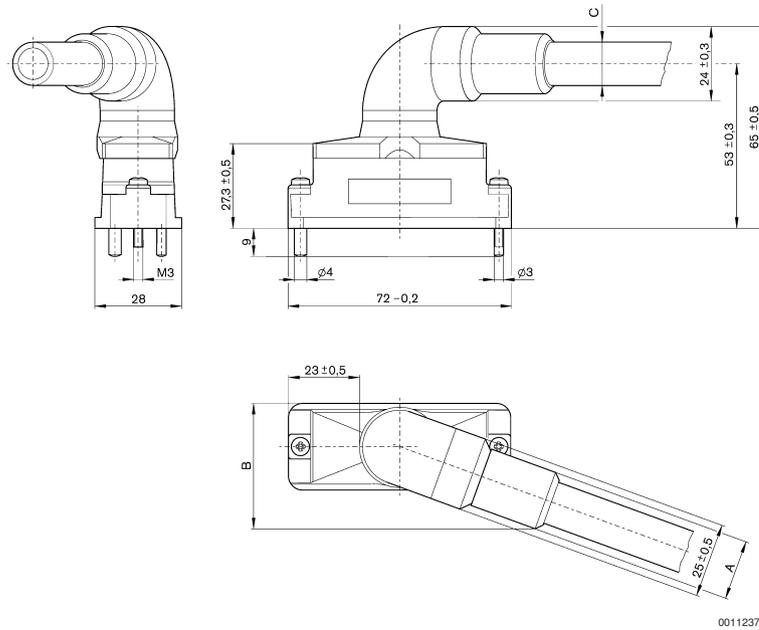
2) max. 32 valve coils

cable identification as per DIN 47100

Valve terminal systems → Valve terminal systems

★ Series HF03
Accessories

Dimensions



Part No.	A ±0,5	B -2,0	C ±0,2									
R412006726	17.3	40	11.2									
R412006729	19.3	41	13.5									
R412006727	17.3	40	11.2									
R412006730	19.3	41	13.5									
R412006731	19.3	41	13.5									

★ Pressure regulator subplate



Version
Ambient temperature min./max.
Medium temperature min./max.
Medium
Particle size max.
Oil content of compressed air

Poppet valve
+0°C / +50°C
+0°C / +50°C
Compressed air
5 µm
0 mg/m³ - 5 mg/m³

Materials:
Housing
Seals

Polyamide
Acrylonitrile Butadiene Rubber

Technical Remarks

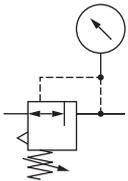
- Protection class when mounted: IP65

★ Core products - preferably for new constructions, worldwide service
● Service products - existing standard program, worldwide service
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Valve terminal systems → Valve terminal systems

★ Series HF03

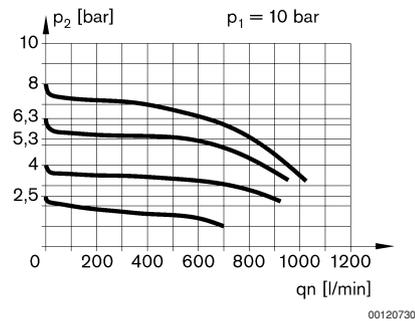
Accessories

	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)2)	R412004883 R412009413

1) Pressure gauge 0-1 MPa

2) Push-in fitting Ø 4 mm

Flow diagram

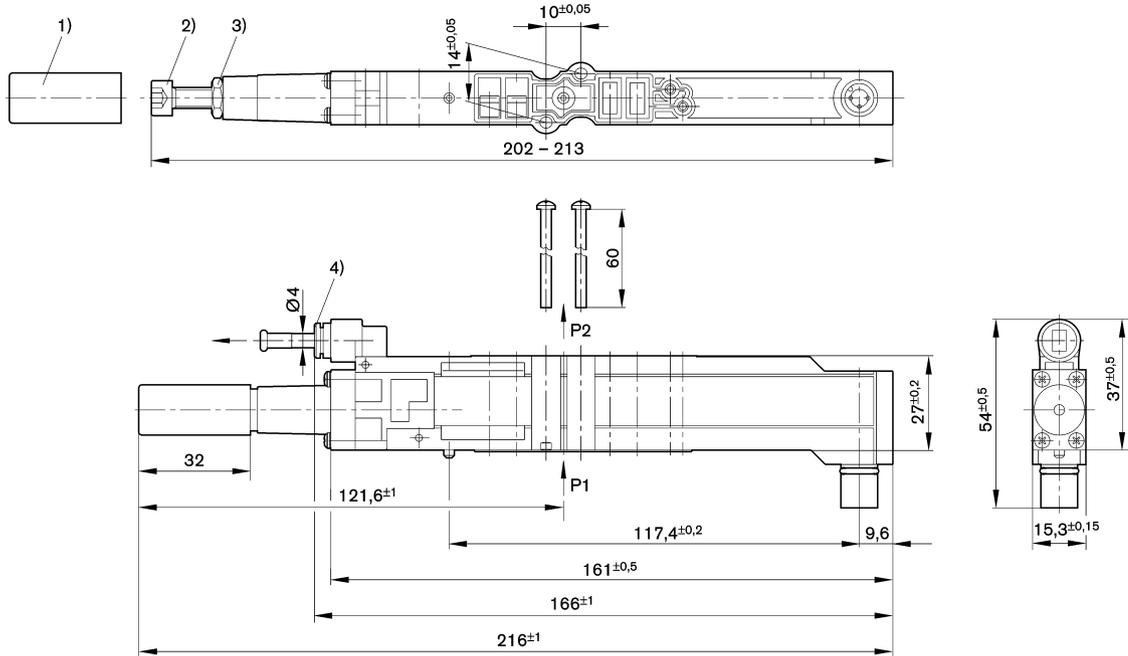
 p_1 = working pressure; p_2 = secondary pressure; q_n = nominal flow

00120730

Valve terminal systems → Valve terminal systems

★ Series HF03
Accessories

Dimensions



00120732

1) Locking cap; 2) Regulating screw; 3) Counter nut; 4) Push-in fitting;
p1 = working pressure; p2 = secondary pressure

★ CKD kit, for series HF03
compressed air connection output: Ø 8 - G 1/8; Single base plate principle



00112335

Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Number of valve positions	1
Grid dimension	15.8 mm
Tightening torque for mounting screws	1.1 Nm

Materials:	
Subbase	Polyamide
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“.

Valve terminal systems → Valve terminal systems

★ Series HF03

Accessories

Type	Compressed air connection					Qn	Part No.
	Input	Output	Exhaust	Pilot control exhaust	Pilot connection		
	[1]	[2 / 4]	[3 / 5]			[l/min]	
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	G 1/4	Ø 8	G 3/8	G 1/8	without	700	0821758020
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	G 1/4	Ø 8	G 3/8	G 1/8	G 1/8	700	0821758030
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	G 1/4	G 1/8	G 3/8	G 1/8	without	700	0821758040
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	G 1/4	G 1/8	G 3/8	G 1/8	G 1/8	700	0821758050
Part No.	Working pressure min./max.		Pilot				
0821758020	2.5 / 10		internal				
0821758030	-1 / 10		external				
0821758040	2.5 / 10		internal				
0821758050	-1 / 10		external				

End plate with plug connector as per DIN 41612/IEC603-2 (form C/2) or transition plate for CMS bus modules can be selected

1 = G1/4, 10 mm deep

2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8

3 and 5 = G3/8, 10 mm deep

R = G1/8, 8 mm deep

X = G1/8, 8 mm deep, connection X plugged with internal pilot control

★ Core products - preferably for new constructions, worldwide service

● Service products - existing standard program, worldwide service

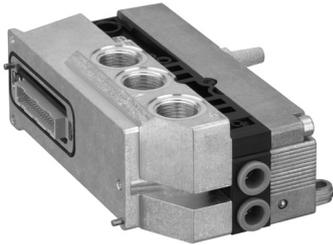
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Valve terminal systems → Valve terminal systems

★ **Series HF03**
Accessories

★ **CKD kit**

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



00112334

Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
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
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]			[l/min]	
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	G 1/4	Ø 8	G 3/8	G 1/8	without	700	0821758021
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	G 1/4	Ø 8	G 3/8	G 1/8	G 1/8	700	0821758031
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	G 1/4	G 1/8	G 3/8	G 1/8	without	700	0821758041

- ★ Core products - preferably for new constructions, worldwide service
 - Service products - existing standard program, worldwide service
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Valve terminal systems → Valve terminal systems

★ Series HF03

Accessories

Type	Compressed air connection					Qn	Part No.
	Input	Output	Exhaust	Pilot control exhaust	Pilot connection		
	[1]	[2 / 4]	[3 / 5]			[l/min]	
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	G 1/4	G 1/8	G 3/8	G 1/8	G 1/8	700	0821758051
Part No.	Working pressure min./max.				Pilot		
0821758021	2.5 / 10				internal		
0821758031	-1 / 10				external		
0821758041	2.5 / 10				internal		
0821758051	-1 / 10				external		

End plate with plug connector as per DIN 41612/IEC603-2 (form C/2) or transition plate for CMS bus modules can be selected

1 = G1/4, 10 mm deep

2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8

3 and 5 = G3/8, 10 mm deep

R = G1/8, 8 mm deep

X = G1/8, 8 mm deep, connection X plugged with internal pilot control

★ Accessories, for series HF03



Part No.	Type	Weight [kg]	Delivery quantity [pcs]						
1821039033	Supply plate	0.143	-						
1825700085	Blanking plate	0.064	-						
1827020285	Separator	0.001	1						

Further accessories:

For electrical connectors, contact bridges, plugs and cables, see the Chapter "Valve terminal systems/electrical connectors and accessories."

For connectors, silencers, etc., see the Chapter "Assembly material."

For bus connections, see the Chapter "Control systems".

★ Core products - preferably for new constructions, worldwide service

● Service products - existing standard program, worldwide service

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Valve terminal systems → Valve terminal systems

★ **Series HF03**
Accessories

Part No.	Type	Weight [kg]	Delivery quantity [pcs]						
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, push-in fitting G1/8, for single 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						
1821015089	Base plate gasket for pneumatic parts	0.001	10						
1821015090	Base plate gasket for electrical part	0.001	10						
1821015836	valve/base plate seal	0.001	10						
1823105007	Blanking plug for port 2 and 4, Ø 8 mm	0.002	25						

Further accessories:

For electrical connectors, contact bridges, plugs and cables, see the Chapter "Valve terminal systems/electrical connectors and accessories."

For connectors, silencers, etc., see the Chapter "Assembly material."

For bus connections, see the Chapter "Control systems".

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