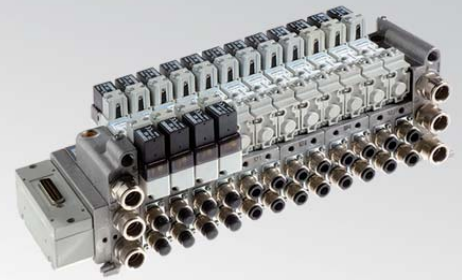


**CHARACTERISTICS**

Ambient temperature	-20 ÷ +50 °C
Fluid	50 µm filtered air, with or without lubrication
Commutation system	spool
Max pressure	9 bar (electrical) 10 bar (pneumatic)
Connections	ISO 15407-1/2 interface
Nominal bore (mm)	6 (18 mm) 8 (26 mm)
Nominal flow rate (NI/min)	see table below
Valve body	acetalic resin with aluminium cover
Seals	nitrile rubber
Spool	aluminium
Electropilot/Coil	A series/U05
Voltage	12 V DC - 24 V AC/DC - 48 V AC - 110 V AC - 230 V AC
Power consumption	2 W
Manual override	recessed button - 1 position
Protection degree	IP65


**CODIFICATION KEY**

B	D	E	-	3	3	4	4	2	4	
1				2	3	4	5	6		7

<b>1 Series</b>	<b>2 Size</b>	<b>3 Type</b>
<b>BDE</b> = Solenoid valves with integrated electrical connection 24 V DC	<b>BDB</b> = Solenoid valves with electrical connection 24 V DC, with connector M12	<b>2</b> = 5/2 <b>3</b> = 5/3 c.c. <b>4</b> = 5/3 o.c. <b>5</b> = 5/3 p.c. <b>6</b> = 3/2+3/2 NC-NC <b>7</b> = 3/2+3/2 NC-NO <b>8</b> = 3/2+3/2 NO-NO

**Coils and connectors included**

<b>4 Control 14</b>	<b>5 Return 12</b>	<b>6 Coil voltage</b>	<b>7 Options</b>
<b>4</b> = Electrical amplified	<b>0</b> = Pneumomechanical spring <b>1</b> = Mechanical spring <b>4</b> = Electrical amplified <b>7</b> = Electrical not amplified	<b>24</b> = 24 V DC (standard) <b>12</b> = 12 V DC (upon request)	<b>D</b> = External pilot supply

B	D	A	-	3	3	4	4	
1				2	3	4	5	6

<b>1 Series</b>	<b>2 Size</b>	<b>3 Type</b>
<b>BDA</b> = Valves and solenoid valves	<b>3</b> = 18 mm <b>4</b> = 26 mm	<b>2</b> = 5/2 <b>3</b> = 5/3 c.c. <b>4</b> = 5/3 o.c. <b>5</b> = 5/3 p.c. <b>6</b> = 3/2+3/2 NC-NC <b>7</b> = 3/2+3/2 NC-NO <b>8</b> = 3/2+3/2 NO-NO

**Coils and connectors not included, to be purchased separately**

<b>4 Control 14</b>	<b>5 Return 12</b>	<b>6 Options</b>
<b>3</b> = Pneumatic amplified <b>4</b> = Electrical amplified only DC <b>5</b> = Electrical amplified DC/AC	<b>0</b> = Pneumomechanical spring <b>1</b> = Mechanical spring <b>2</b> = Pneumatic not amplified <b>3</b> = Pneumatic amplified	<b>4</b> = Electrical amplified only DC <b>5</b> = Electrical amplified DC/AC <b>7</b> = Electrical not amplified only DC <b>8</b> = Electrical not amplified DC/AC

c.c. = closed centres    o.c. = open centres    p.c. = pressurized centres

**U05 Coils side 15 mm**

Part No.	Nominal voltage		Frequency	Power consumption			
	V DC	V AC		DC W		AC VA	
			HZ	hold	speed-up	hold	speed-up
DD-040	-	24	50/60	-	-	2,3	3,2
DD-041	12	-	-	2	2	-	-
DD-050	-	48	50/60	-	-	2,3	3,2
DD-051	24	-	-	2	2	-	-
DD-060	-	110	50/60	-	-	2,3	3,2
DD-070	-	230	50/60	-	-	2,3	3,2

**Nominal flow rate (NI/min)**

BD 18 mm	VDMA-ISO			Oversized		
	Ø4	Ø6	Ø8	Ø4	Ø6	Ø8
5/2	200	440	620	200	480	800
5/3	200	440	580	200	460	720
3/2+3/2	200	440	600	200	460	720

BD 26 mm	VDMA-ISO				Oversized			
	Ø6	Ø8	Ø10	Ø12	Ø6	Ø8	Ø10	Ø12
5/2	500	950	1200	1250	500	1050	1500	1700
5/3	500	900	1100	1150	500	1050	1300	1400
3/2+3/2	500	950	1150	1250	500	1050	1450	1650

**BDE Electrical impulse - Solenoid valve with integrated electrical connection**

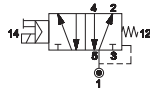
■ Single impulse



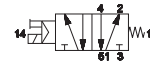
18 mm



26 mm



BDE-324024 18 mm  
BDE-424024 26 mm



BDE-324124 18 mm  
BDE-424124 26 mm

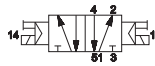
■ Double impulse



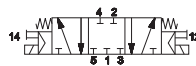
18 mm



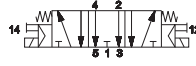
26 mm



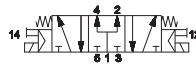
BDE-324424 18 mm  
BDE-424424 26 mm



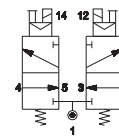
BDE-334424 18 mm  
BDE-434424 26 mm



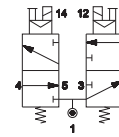
BDE-344424 18 mm  
BDE-444424 26 mm



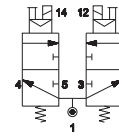
BDE-354424 18 mm  
BDE-454424 26 mm



BDE-364424 18 mm  
BDE-464424 26 mm



BDE-374424 18 mm  
BDE-474424 26 mm



BDE-384424 18 mm  
BDE-484424 26 mm

**BDB Electrical impulse - Solenoid valve with connector M12**

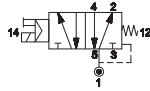
■ Single impulse



18 mm



26 mm



BDB-324024 18 mm  
BDB-424024 26 mm



BDB-324124 18 mm  
BDB-424124 26 mm

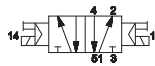
■ Double impulse



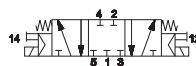
18 mm



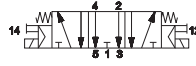
26 mm



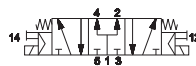
BDB-324424 18 mm  
BDB-424424 26 mm



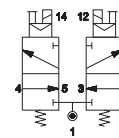
BDB-334424 18 mm  
BDB-434424 26 mm



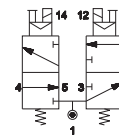
BDB-344424 18 mm  
BDB-444424 26 mm



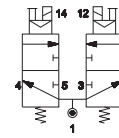
BDB-354424 18 mm  
BDB-454424 26 mm



BDB-364424 18 mm  
BDB-464424 26 mm



BDB-374424 18 mm  
BDB-474424 26 mm



BDB-384424 18 mm  
BDB-484424 26 mm

BDA Pneumatic impulse

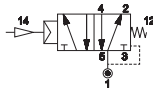
■ Single/double impulse



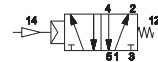
18 mm



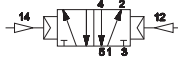
26 mm



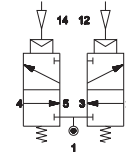
BDA-3230 18 mm  
BDA-4230 26 mm



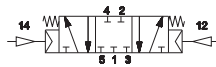
BDA-3231 18 mm  
BDA-4231 26 mm



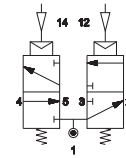
BDA-3233 18 mm  
BDA-4233 26 mm



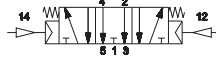
BDA-3633 18 mm  
BDA-4633 26 mm



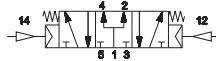
BDA-3333 18 mm  
BDA-4333 26 mm



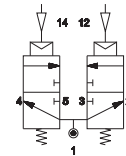
BDA-3733 18 mm  
BDA-4733 26 mm



BDA-3433 18 mm  
BDA-4433 26 mm



BDA-3533 18 mm  
BDA-4533 26 mm



BDA-3833 18 mm  
BDA-4833 26 mm

BDA Electrical impulse - External electrical connection

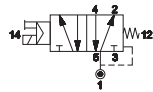
■ Single impulse



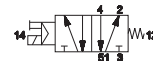
18 mm



26 mm



BDA-3240 18 mm  
BDA-4240 26 mm



BDA-3241 18 mm  
BDA-4241 26 mm

■ Double impulse



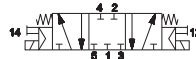
18 mm



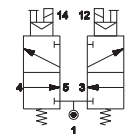
26 mm



BDA-3244 18 mm  
BDA-4244 26 mm



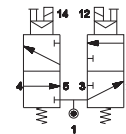
BDA-3344 18 mm  
BDA-4344 26 mm



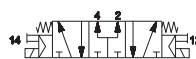
BDA-3644 18 mm  
BDA-4644 26 mm



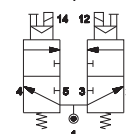
BDA-3444 18 mm  
BDA-4444 26 mm



BDA-3744 18 mm  
BDA-4744 26 mm



BDA-3544 18 mm  
BDA-4544 26 mm



BDA-3844 18 mm  
BDA-4844 26 mm



DIN C (8 mm)

For further information please contact our Sales Office.

BDE Manifold sub-bases - Integrated electrical connection

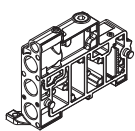
■ 18 mm

■ 26 mm

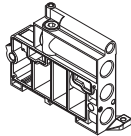


18 mm

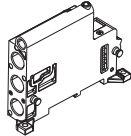
**BDF-3100**    **BDF-3115**    **BDF-3120**    **BDF-3140TIM**    **BDF-3180**    **BDF-3185**    **BDF-3190**



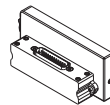
left supply plate G3/8



right supply plate G3/8



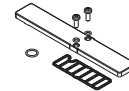
intermediate supply plate G3/8



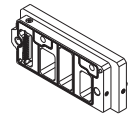
multipolar male connection module: 25 poles, type D



pressure separator

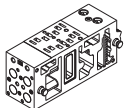


closing plate for unused valve place

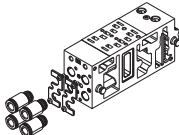


connecting interface for valves side 18-26 mm

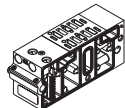
**BDF-3210**    **BDF-3230(a)**    **BDF-3310**    **BDF-3330(a)**    **BDF-3400**    **GZR-100**    **GZR-V10004/06/08**



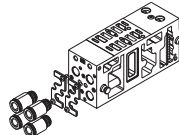
two-place sub-base in compliance with VDMA-ISO flow rate 620 NI/min fittings Ø 4-6-8 mm



two-place sub-base in compliance with VDMA-ISO flow rate 620 NI/min fittings Ø 4-6-8 mm



two-place sub-base with increased flow rate 800 NI/min



two-place sub-base with increased flow rate 800 NI/min fittings Ø 4-6-8 mm



single one-place sub-base with increased flow rate



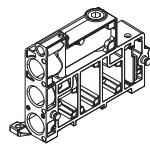
blanking plug



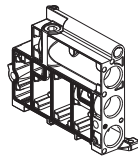
UNIVER designed fittings  
GZR-V10004 Ø4 mm  
GZR-V10006 Ø6 mm  
GZR-V10008 Ø8 mm

26 mm

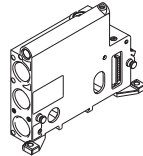
**BDF-4100**    **BDF-4115**    **BDF-4120**    **BDF-4140TIM**    **BDF-4180**    **BDF-4185**



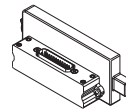
left supply plate G1/2



right supply plate G1/2



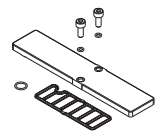
intermediate supply plate G1/2



multipolar male connection module: 25 poles, type D

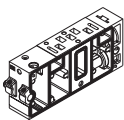


plate for separating supply pressures

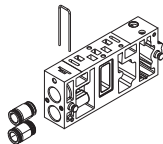


closing plate for unused valve place

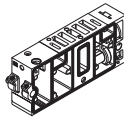
**BDF-4210/20**    **BDF-4230(a)**    **BDF-4310/20**    **BDF-4330/31/32(a)**    **BDF-4400**    **GZR-VV1006/08/10**



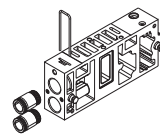
one-place sub-base in compliance with VDMA-ISO flow rate 1250 NI/min  
BDF-4210 G1/4 connections  
BDF-4220 G3/8 connections



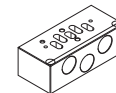
one-place sub-base in compliance with VDMA-ISO flow rate 1250 NI/min fittings Ø 6-8-10 mm



one-place sub-base with increased flow rate 1700 NI/min  
BDF-4310 G1/4 connections  
BDF-4320 G3/8 connections



one-place sub-base with increased flow rate 1700 NI/min fittings Ø 6-8-10 mm



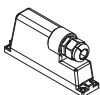
single one-place sub-base with increased flow rate



UNIVER designed fittings  
GZR-VV1006 Ø6 mm  
GZR-VV1008 Ø8 mm  
GZR-VV1010 Ø10 mm

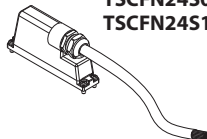
Electrical connections

**TSCFN24S000**



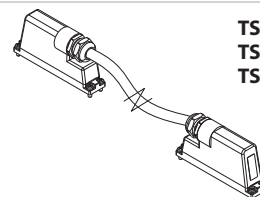
female connector 25 poles sub-D type no cable - M3x8 fixing screws

**TSCFN24S0300**  
**TSCFN24S0500**  
**TSCFN24S1000**



female connector: 25 poles, sub-D type, prewired for 26 coils (3-5-10m length) M3x8 fixing screws

**TSCFN16D0300**  
**TSCFN16D0500**  
**TSCFN16D1000**



sub-D type male/female flying connector (upon request) prewired for 16 coils with cable Ø 8 mm (3-5-10 m length) suitable for dynamic laying - M3 x 8 fixing screws

(a) = sub-base including fixing plate for fittings (fittings excluded)

BDA/BDB Manifold sub-bases - Electrical connection with external connector

■ 18 mm

■ 26 mm



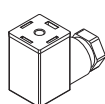
18 mm

BDF-3110	BDF-3115	BDF-3125	BDF-3180	BDF-3185	BDF-3191	BDF-3400
left supply plate G3/8	right supply plate G3/8	intermediate supply plate G3/8	pressure separator	closing plate for unused valve place	interface for connecting valves side 18-26 mm	single one-place sub-base with increased flow rate
BDF-3211/2 (b)	BDF-3231/2 (a) - (b)	BDF-3311/2 (b)	BDF-3331/2 (a) - (b)	GZR-100	GZR-V10004/6/8	DD-...
two-place sub-base in compliance with VDMA-ISO flow rate 620 NI/min G1/8 connections	two-place sub-base in compliance with VDMA-ISO flow rate 620 NI/min fittings Ø 4-6-8 mm	two-place sub-base with increased flow rate 800 NI/min G1/8 connections	two-place sub-base with increased flow rate 800 NI/min fittings Ø 4-6-8 mm	blanking plug	UNIVER designed fittings GZR-V10004 Ø4 mm GZR-V10006 Ø6 mm GZR-V10008 Ø8 mm	U05 coil side 15 mm

26 mm

BDF-4110	BDF-4115	BDF-4125	BDF-4180	BDF-4185	BDF-4400
left supply plate G1/2	right supply plate G1/2	intermediate supply plate G1/2	pressure separator	closing plate for unused valve place	single one-place sub-base with increased flow rate
BDF-4211/.. (b)	BDF-4231/2 (a) - (b)	BDF-4311/.. (b)	BDF-4331/2 (a) - (b)	GZR-VV1006/8/10	DD-...
one-place sub-base in compliance with VDMA-ISO flow rate 1250 NI/min G1/4 connect. BDF-4211 BDF-4212	one-place sub-base in compliance with VDMA-ISO flow rate 1250 NI/min fittings Ø 6-8-10 mm BDF-4231 BDF-4232	one-place sub-base with increased flow rate 1700 NI/min G1/4 connect. BDF-4311 BDF-4312	one-place sub-base with increased flow rate 1700 NI/min fittings Ø 6-8-10 mm BDF-4321 BDF-4322	UNIVER designed fittings GZR-VV1006 Ø6 mm GZR-VV1008 Ø8 mm GZR-VV1010 Ø10 mm	U05 coil side 15 mm

Electrical connections



AM-5109

15 mm connector

(a) = sub-base including fixing plate for fittings (fittings excluded)  
 (b) = part no. ending: 1 = electrical non integrated 2 = only pneumatic