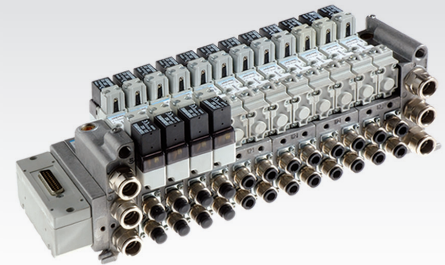


CHARACTERISTICS

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	NBR
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	

1 Series	2 Size	3 Type
BDE = Solenoid valves with integrated electrical connection 24 V DC	BDB = Solenoid valves with electrical connection 24 V DC, with connector M12	3 = 18 mm 4 = 26 mm 2 = 5/2 3 = 5/3 c.c. 4 = 5/3 o.c. 5 = 5/3 p.c. 6 = 3/2+3/2 NC-NC 7 = 3/2+3/2 NC-NO 8 = 3/2+3/2 NO-NO

Coils and connectors included

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

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

1 Series	2 Size	3 Type	4 Control 14
BDA = Valves and solenoid valves	3 = 18 mm 4 = 26 mm	2 = 5/2 3 = 5/3 c.c. 4 = 5/3 o.c. 5 = 5/3 p.c. 6 = 3/2+3/2 NC-NC 7 = 3/2+3/2 NC-NO 8 = 3/2+3/2 NO-NO	3 = Pneumatic amplified 4 = Electrical amplified only DC 5 = Electrical amplified DC/AC

Coils and connectors not included, to be purchased separately

5 Return 12	6 Options	7 ATEX option
0 = Pneumomechanical spring 1 = Mechanical spring 2 = Pneumatic not amplified 3 = Pneumatic amplified	4 = Electrical amplified only DC 5 = Electrical amplified DC/AC 7 = Electrical not amplified only DC 8 = Electrical not amplified DC/AC	D = External pilot supply X = Atex (upon request) See ATEX Catalogue for types and versions

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

U05 Coils side 15 mm

Part No.	Nominal voltage		Frequency	Power consumption			
				DCW		ACVA	
	V DC	V AC		HZ	hold	speed-up	hold
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

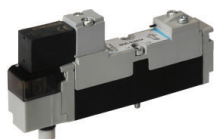
Nominal flow rate (NI/min)

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

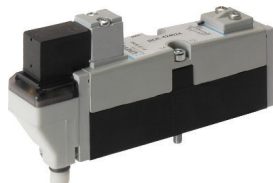
BD 26 mm	VDMA-ISO				Oversized			
	Ø6	Ø8	Ø10	Ø12	Ø6	Ø8	Ø10	Ø12
5/2	500	950	1200	1250	500	1050	1500	1700
5/3	500	900	1100	1150	500	1050	1300	1400
3/2+3/2	500	950	1150	1250	500	1050	1450	1650

BDE Electrical impulse - Solenoid valve with integrated electrical connection

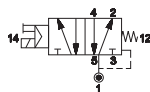
Single impulse



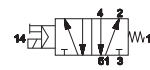
18 mm



26 mm

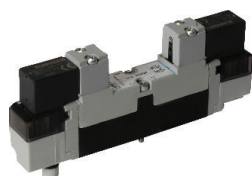


BDE-324024 18 mm
BDE-424024 26 mm

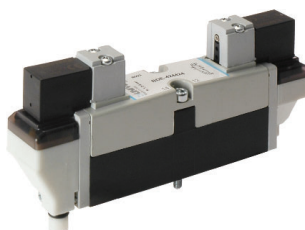


BDE-324124 18 mm
BDE-424124 26 mm

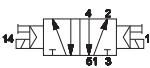
Double impulse



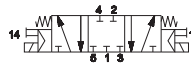
18 mm



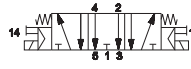
26 mm



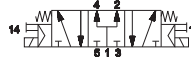
BDE-324424 18 mm
BDE-424424 26 mm



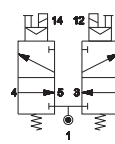
BDE-334424 18 mm
BDE-434424 26 mm



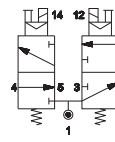
BDE-344424 18 mm
BDE-444424 26 mm



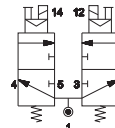
BDE-354424 18 mm
BDE-454424 26 mm



BDE-364424 18 mm
BDE-464424 26 mm



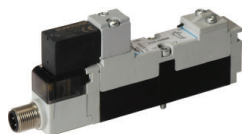
BDE-374424 18 mm
BDE-474424 26 mm



BDE-384424 18 mm
BDE-484424 26 mm

BDB Electrical impulse - Solenoid valve with connector M12

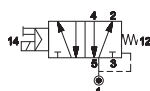
Single impulse



18 mm



26 mm

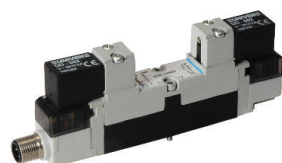


BDB-324024 18 mm
BDB-424024 26 mm

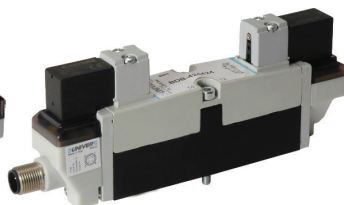


BDB-324124 18 mm
BDB-424124 26 mm

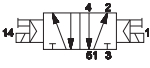
Double impulse



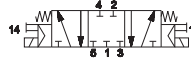
18 mm



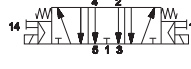
26 mm



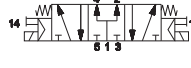
BDB-324424 18 mm
BDB-424424 26 mm



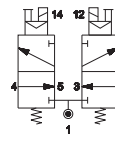
BDB-334424 18 mm
BDB-434424 26 mm



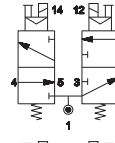
BDB-344424 18 mm
BDB-444424 26 mm



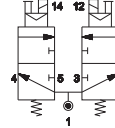
BDB-354424 18 mm
BDB-454424 26 mm



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

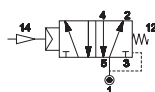
Single/double impulse



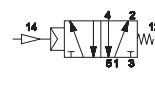
18 mm



26 mm



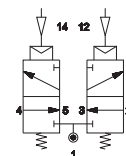
BDA-3230 18 mm
BDA-4230 26 mm



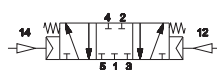
BDA-3231 18 mm
BDA-4231 26 mm



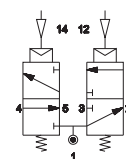
BDA-3233 18 mm
BDA-4233 26 mm



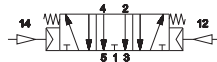
BDA-3633 18 mm
BDA-4633 26 mm



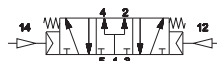
BDA-3333 18 mm
BDA-4333 26 mm



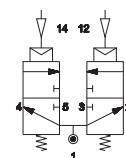
BDA-3733 18 mm
BDA-4733 26 mm



BDA-3433 18 mm
BDA-4433 26 mm



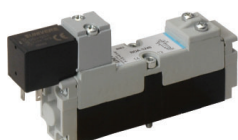
BDA-3533 18 mm
BDA-4533 26 mm



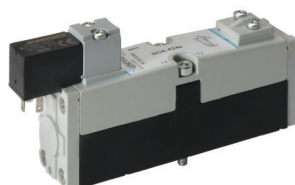
BDA-3833 18 mm
BDA-4833 26 mm

BDA Electrical impulse - External electrical connection

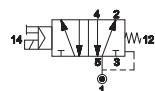
Single impulse



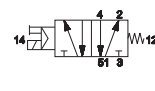
18 mm



26 mm



BDA-3240 18 mm
BDA-4240 26 mm

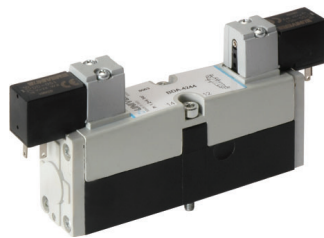


BDA-3241 18 mm
BDA-4241 26 mm

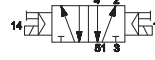
Double impulse



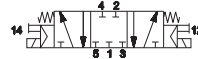
18 mm



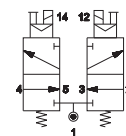
26 mm



BDA-3244 18 mm
BDA-4244 26 mm



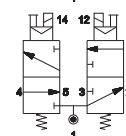
BDA-3344 18 mm
BDA-4344 26 mm



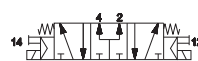
BDA-3644 18 mm
BDA-4644 26 mm



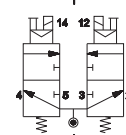
BDA-3444 18 mm
BDA-4444 26 mm



BDA-3744 18 mm
BDA-4744 26 mm



BDA-3544 18 mm
BDA-4544 26 mm



BDA-3844 18 mm
BDA-4844 26 mm



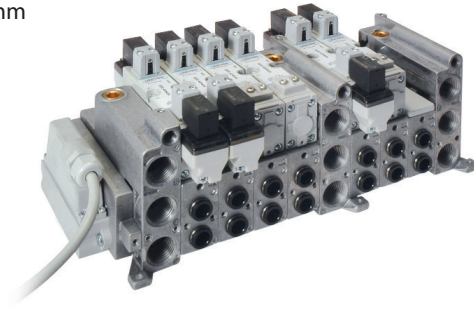
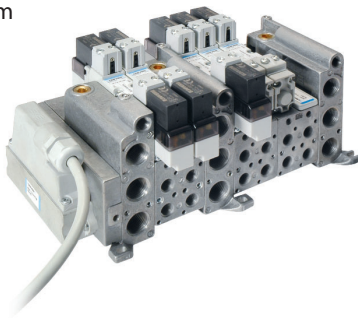
DIN C (8 mm)

For further information please contact our Sales Office.

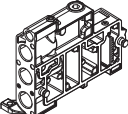
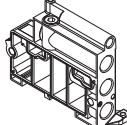
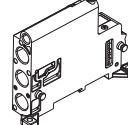
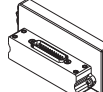
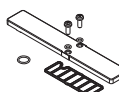
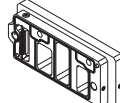
BDE Manifold sub-bases - Integrated electrical connection

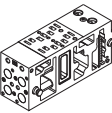
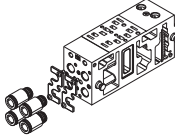
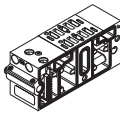
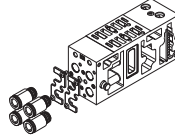
■ 18 mm

■ 26 mm

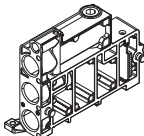
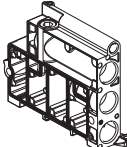
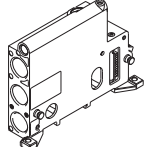
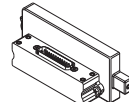
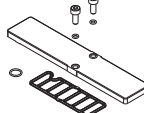


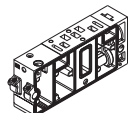
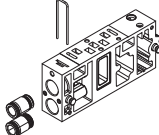
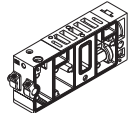
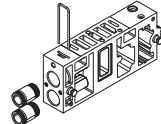
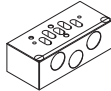
18 mm

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 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	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

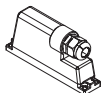
26 mm

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

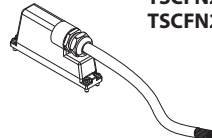
BDF-4210/20	BDF-4230 (a)	BDF-4310/20	BDF-4330 (a)	BDF-4400	GZR-VV1006/08/10
					
one-place sub-base in compliance with VDMA-ISO flow rate 1250 NI/min BDF-4210 G1/4 connections BDF-4220 G3/8 connections	one-place sub-base in compliance with VDMA-ISO flow rate 1250 NI/min fittings Ø 6-8-10 mm	one-place 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

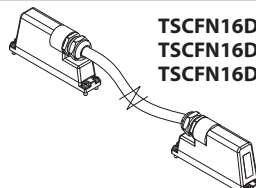
TSCFN24S000



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

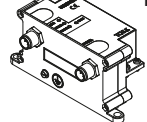
TSCFN24S0300
TSCFN24S0500
TSCFN24S1000

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

IO-LINK connection

TCXLKA
TCXLKB

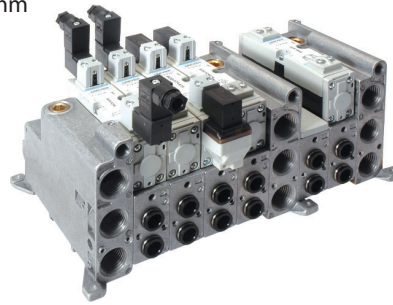
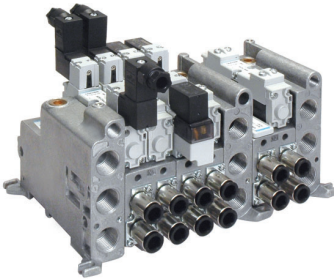
connection module
IO-LINK (port class A/B)

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

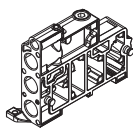
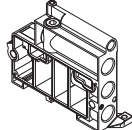
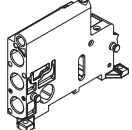
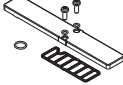
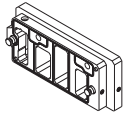
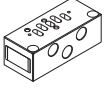
BDA/BDB Manifold sub-bases - Electrical connection with external connector

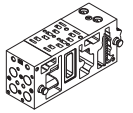
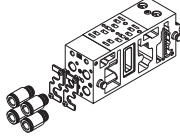
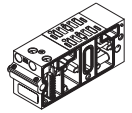
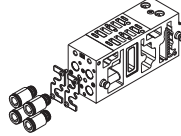
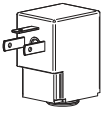
■ 18 mm

■ 26 mm

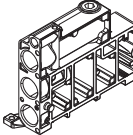
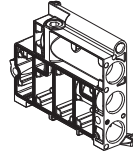
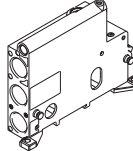
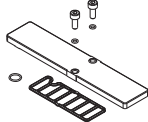
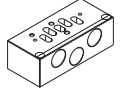


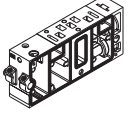
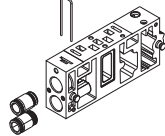
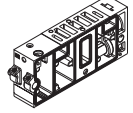
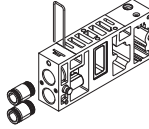
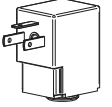
18 mm

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 G1/8

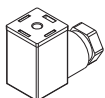
BDF-3211/2 (b)	BDF-3231/2 (a) - (b)	BDF-3311/2 (b)	BDF-3331/2 (a) - (b)	GZR-100	GZR-V10004/6/8	DD-...
						
two-place sub-base in compliance with VDMA-ISO flow rate 620 NI/min G1/8 connections	two-place sub-base in compliance with VDMA-ISO flow rate 620 NI/min fittings Ø 4-6-8 mm	two-place sub-base 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 G3/8

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