

SPOOL

for all applications



MIXED

for heavy applications

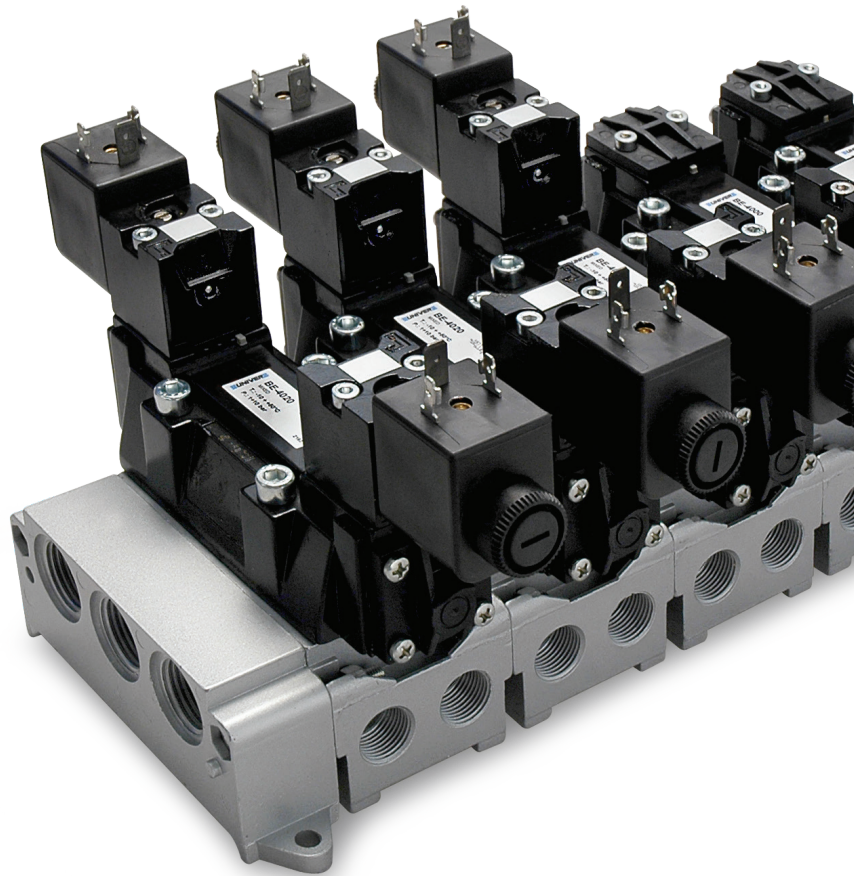


MIXED and SPOOL SYSTEM

Versions with either mixed or spool system available for all series

ORIGINAL

Valves and sub-bases UNIVER Original since 1980



BE 3 - ISO 1

1480 NI/min



M12

BE 4 - ISO 2

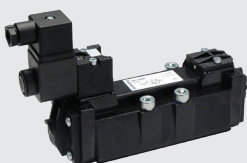
2300 NI/min



M12

BE 5 - ISO 3

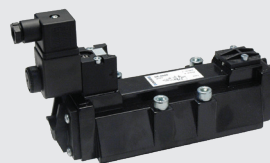
4200 NI/min



M12

BE 6 - ISO 4

6600 NI/min





ISO 5599/1 Valves

- Compliant with international ISO 5599/1 standards
- Complete range: sizes 1 - 2 - 3 - 4
- Two switching systems available: mixed and spool type
- High flow rate
- Short internal stroke
- No lubrication required
- Version with M12 electrical connection for the Automotive industry (sizes 1 - 2 - 3)
- Modular and individual manifolds available
- Possibility of combining different sub-base sizes through dedicated interfaces



Fluid	50 µm filtered air (mixed system) 50 µm filtered air, with or without lubrication (spool system)			
Ambient temperature	-10 ÷ +50 °C			
Fluid temperature	Max +50 °C			
Commutation system	mixed system, spool system			
Ways/Positions	5/2, 5/3			
Pressure	10 bar Max			
Control	indirect electro-pneumatic, pneumatic			
Return	mechanical spring, pneumomechanical spring, pneumatic, electric			
Connections	ISO 5599/1 interface			
	size 1	size 2	size 3	size 4
Nominal Ø (mm)	8	10	15	19
Nominal flow rate (NI/min)	1480	2300	4200	6600
Valve body	acetalic resin			
Cover	aluminium			
Seals	mixed system: nitrile rubber and polyurethane spool system: nitrile rubber			
Sub-base	zamak - aluminium			
Actuators	technopolymer			
Spool	aluminium			
Electropilot	AA series			
Coil	series U3			
Power consumption	2,5 W (DC) - 5 VA (AC)			
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC			
Connector	AM 5111			
Manual override	impulse screw - 2 positions, button with tool (BE) recessed button - 1 position (BE12)			

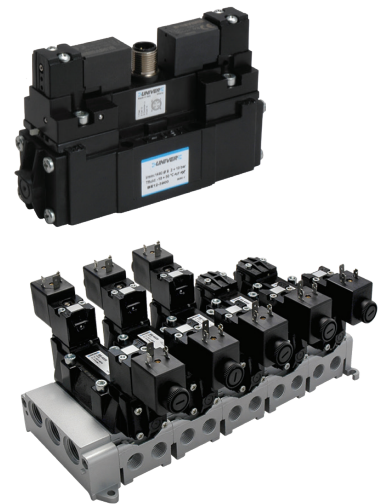


Reference Standard

II 2G Ex h IIC T5 Gb



II 2D Ex h IIIC T100°C Db



MIXED

for heavy applications

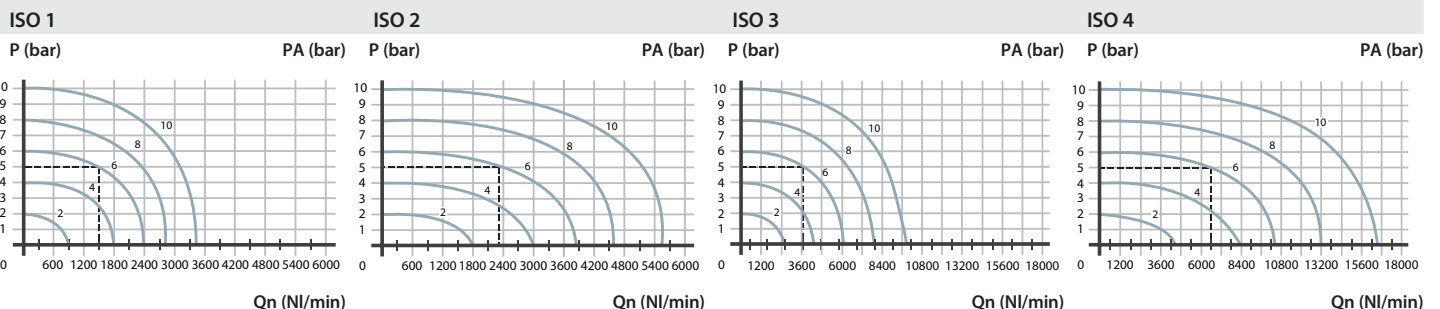


SPOOL

for all applications



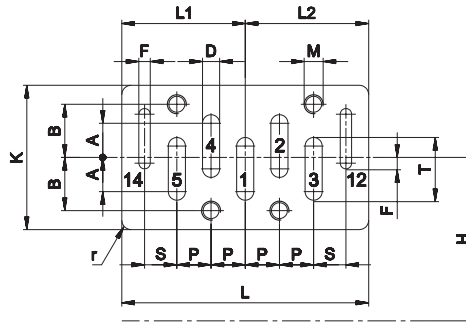
FLOW RATE CHARACTERISTICS



P = Working pressure
PA = Supply pressure
Qn = Nominal flow rate

ISO 5599/1 STANDARD

The ISO standard for pneumatic valves is accepted by industry and by the majority of the main important pneumatic valve manufacturers throughout the world. The choice of valves according to ISO standard guarantees to the user the interchangeability of both the valve body and the electromagnetic part.



1 = Supply port
3 - 5 = Exhaust
2 - 4 = Use
12 - 14 = Pilots

	A	B	D	F	H	K	L	L1	L2	M	P	r	S	T
ISO 1	9	14	4,5	3	43	38	65	32,5	32,5	M5	9	2,5	8,5	16,5
ISO 2	10	19	7	3	56	50	81	40,5	40,5	M6	12	3	10	22
ISO 3	11,5	24	10	4	71	64	106	53	53	M8	16	4	13	29
ISO 4	14,5	29	13	4	82	74	142	77,5	64,5	M8	20	4	15,5	36,5

fixes the dimensions of the bearing surface of the valve and provides accommodation between two contiguous planes while guaranteeing, at the time of replacement, that any suitable valve can be inserted in the manifold assembly. It also provides a clear numbering system for the ports. Main connecting ports:

(e.g. single electrical impulse solenoid mounted side 14 single pneumatic impulse control at 14)



Key



Screwdriver adjustment



Pressure applied with a tool

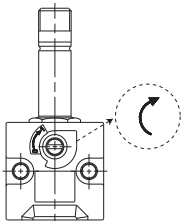


Manual adjustment

MANUAL CONTROL STANDARD



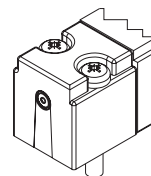
TWO-POSITION SCREWDRIVER



Standard **BE**



PRESSURE-OPERATED, 1 POSITION



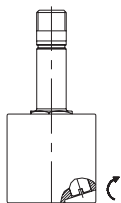
Standard **BE12**

MANUAL CONTROLS ON REQUEST



TWO-POSITION SCREWDRIVER

LETTER TO BE ADDED AT THE END OF THE ELECTROPILOT CODE

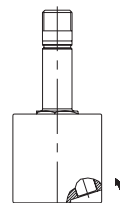


A
EXAMPLE:
BE-5150A



PRESSURE-OPERATED WITH TOOL

LETTER TO BE ADDED AT THE END OF THE ELECTROPILOT CODE



U
EXAMPLE:
BE-5150U



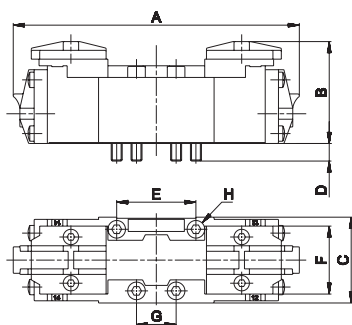
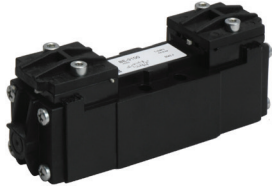
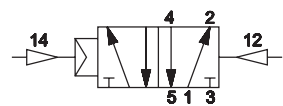
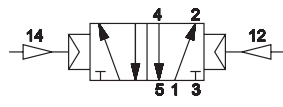
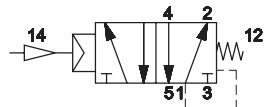
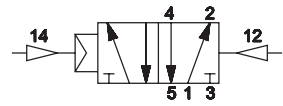
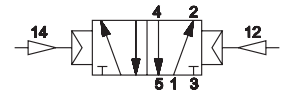
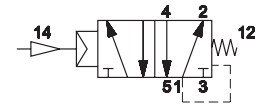
A LEVER



R
EXAMPLE:
BE-5150R

PNEUMATIC IMPULSE

	Code	Way	Size ISO	Control 14	Return 12	Pressure bar	Response Time (ms)		Weight kg
							En.	De-en.	
	MIXED SYSTEM								
	BE-3100	5/2	1	pneumatic amplified	pneumatic + spring	2÷10	9	18	0,30
	BE-4100	5/2	2	pneumatic amplified	pneumatic + spring	2,3÷10	11	14	0,40
	BE-5100	5/2	3	pneumatic amplified	pneumatic + spring	2,5÷10	19	49	0,65
	BE-6100	5/2	4	pneumatic amplified	pneumatic + spring	3÷10	23	46	0,87
	BE-3150	5/2	1	pneumatic amplified	pneumatic amplified	1÷10	5	5	0,30
	BE-4150	5/2	2	pneumatic amplified	pneumatic amplified	1÷10	6	6	0,40
	BE-5150	5/2	3	pneumatic amplified	pneumatic amplified	1÷10	10	10	0,65
	BE-6150	5/2	4	pneumatic amplified	pneumatic amplified	1,3÷10	12	12	0,87
	BE-3170	5/2	1	pneumatic amplified	pneumatic non-amplified (differential)	2÷10	5	16	0,30
	BE-4170	5/2	2	pneumatic amplified	pneumatic non-amplified (differential)	2÷10	6	13	0,40
	BE-5170	5/2	3	pneumatic amplified	pneumatic non-amplified (differential)	2,2÷10	10	35	0,65
	BE-6170	5/2	4	pneumatic amplified	pneumatic non-amplified (differential)	2,2÷10	12	32	0,87
	SPOOL SYSTEM								
	BE-3800	5/2	1	pneumatic amplified	pneumatic + spring	1,8÷10	11	22	0,30
	BE-4800	5/2	2	pneumatic amplified	pneumatic + spring	2÷10	13	19	0,40
	BE-5800	5/2	3	pneumatic amplified	pneumatic + spring	2,2÷10	21	52	0,65
	BE-6800	5/2	4	pneumatic amplified	pneumatic + spring	2,8÷10	24	29	0,87
	BE-3850	5/2	1	pneumatic amplified	pneumatic amplified	0,8÷10	6	6	0,30
	BE-4850	5/2	2	pneumatic amplified	pneumatic amplified	1÷10	7	7	0,40
	BE-5850	5/2	3	pneumatic amplified	pneumatic amplified	1÷10	12	12	0,65
	BE-6850	5/2	4	pneumatic amplified	pneumatic amplified	1÷10	14	14	0,87
	BE-3870	5/2	1	pneumatic amplified	pneumatic non-amplified (differential)	1,5÷10	6	15	0,30
	BE-4870	5/2	2	pneumatic amplified	pneumatic non-amplified (differential)	1,8÷10	7	14	0,40
BE-5870	5/2	3	pneumatic amplified	pneumatic non-amplified (differential)	2÷10	12	38	0,65	
BE-6870	5/2	4	pneumatic amplified	pneumatic non-amplified (differential)	2÷10	14	31	0,87	

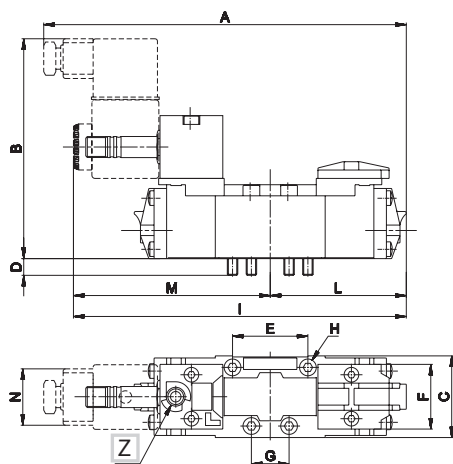
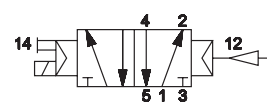
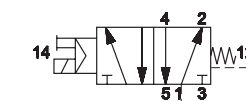
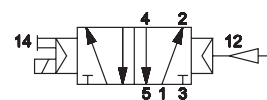
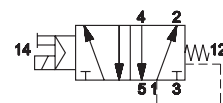


	ISO 1	ISO 2	ISO 3	ISO 4
A	128	145	191	222
B	47	47	63	63
C	39	52	64	74
D	5	5	10	10
E	36	48	64	80
F	28	38	48	58
G	18	24	32	40
H	M5x38	M6x35	M8x50	M8x50

For manual version with button, add "U" to the end of the part number
The solenoid valves are supplied without coil and connector.

SINGLE ELECTRIC IMPULSE

Code	Way	Size ISO	Control 14	Return 12	Pressure bar	Response Time (ms) En.	De-en.	Weight kg
MIXED SYSTEM								
BE-3000	5/2	1	electric amplified	pneumatic + spring	2÷10	20	32	0,37
BE-4000	5/2	2	electric amplified	pneumatic + spring	2,3÷10	24	25	0,47
BE-5000	5/2	3	electric amplified	pneumatic + spring	2,5÷10	32	71	0,82
BE-6000	5/2	4	electric amplified	pneumatic + spring	3÷10	38	62	1,04
BE-3060	5/2	1	electric amplified	pneumatic amplified	1÷10	16	6	0,37
BE-4060	5/2	2	electric amplified	pneumatic amplified	1÷10	17	7	0,47
BE-5060	5/2	3	electric amplified	pneumatic amplified	1÷10	23	15	0,82
BE-6060	5/2	4	electric amplified	pneumatic amplified	1,3÷10	25	16	1,04
SPOOL SYSTEM								
BE-3700	5/2	1	electric amplified	pneumatic + spring	2÷10	21	35	0,37
BE-4700	5/2	2	electric amplified	pneumatic + spring	2,2÷10	24	30	0,47
BE-5700	5/2	3	electric amplified	pneumatic + spring	2,3÷10	33	74	0,82
BE-6700	5/2	4	electric amplified	pneumatic + spring	2,8÷10	39	68	1,04
BE-3760	5/2	1	electric amplified	pneumatic amplified	1÷10	17	8	0,37
BE-4760	5/2	2	electric amplified	pneumatic amplified	1÷10	18	9	0,47
BE-5760	5/2	3	electric amplified	pneumatic amplified	1÷10	26	17	0,82
BE-6760	5/2	4	electric amplified	pneumatic amplified	1,3÷10	27	18	1,04



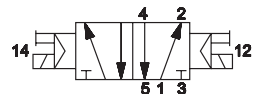
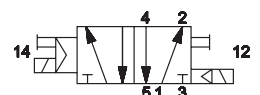
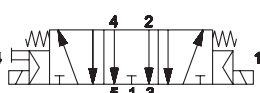
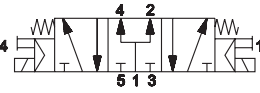
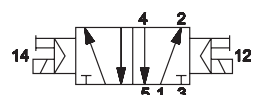
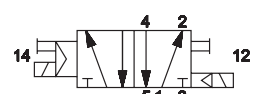
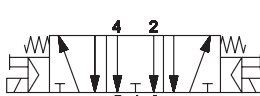
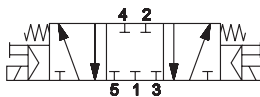
	ISO 1	ISO 2	ISO 3	ISO 4
A	169,5	195,5	219	253
B	105	105	118	118
C	39	52	64	74
D	5	5	10	10
E	36	48	64	80
F	28	38	48	58
G	18	24	32	40
H	M5x38	M6x35	M8x50	M8x50
I	159,5	176	208,5	235
L	64	72,5	95,5	111
M	95,5	103,5	113	124
N	30	30	30	30

Z comando manuale 2 posizioni

For manual version with button, add "U" to the end of the part number

The solenoid valves are supplied without coil and connector.

DOUBLE ELECTRIC IMPULSE

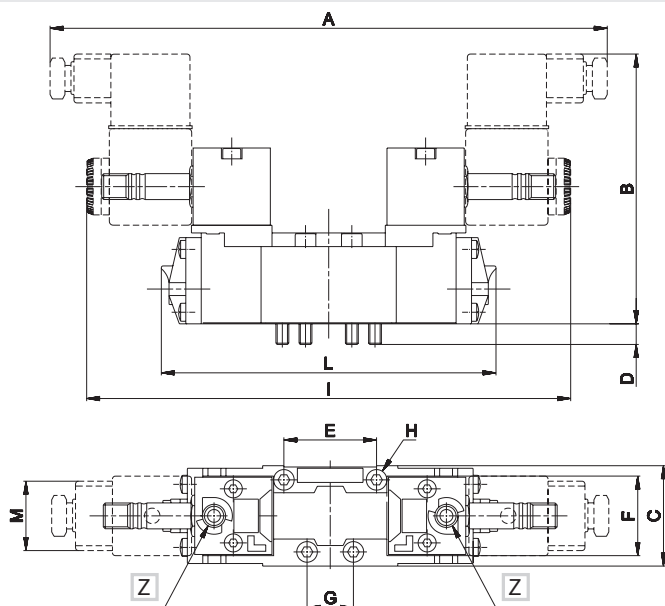
	Code	Way	Size ISO	Control 14	Return 12	Pressure bar	Response Time (ms) En.	De-en.	Weight kg		
	MIXED SYSTEM										
	BE-3020	5/2	1	electric amplified	electric amplified	1÷10	16	16	0,39		
	BE-4020	5/2	2	electric amplified	electric amplified	1÷10	17	17	0,64		
	BE-5020	5/2	3	electric amplified	electric amplified	1÷10	23	23	1,04		
	BE-6020	5/2	4	electric amplified	electric amplified	1,3÷10	25	25	1,21		
	BE-3030	5/2	1	electric amplified	electric unamplified (differential)	2÷10	16	34	0,39		
	BE-4030	5/2	2	electric amplified	electric unamplified (differential)	2÷10	17	29	0,64		
	BE-5030	5/2	3	electric amplified	electric unamplified (differential)	2,2÷10	23	54	1,04		
	BE-6030	5/2	4	electric amplified	electric unamplified (differential)	2,2÷10	25	45	1,21		
	BE-3200	5/3 O.C.	1	electric amplified	electric amplified	3÷10	50	26	0,39		
	BE-4200	5/3 O.C.	2	electric amplified	electric amplified	3÷10	54	24	0,64		
	BE-5200	5/3 O.C.	3	electric amplified	electric amplified	3÷10	108	36	1,04		
	BE-6200	5/3 O.C.	4	electric amplified	electric amplified	3÷10	115	115	1,21		
	BE-3205	5/3 P.C.	1	electric amplified	electric amplified	2÷10	50	26	0,39		
	BE-4205	5/3 P.C.	2	electric amplified	electric amplified	2,3÷10	54	24	0,64		
	BE-5205	5/3 P.C.	3	electric amplified	electric amplified	2,5÷10	108	36	1,04		
	BE-6205	5/3 P.C.	4	electric amplified	electric amplified	3÷10	115	115	1,21		
	SPOOL SYSTEM										
	BE-3720	5/2	1	electric amplified	electric amplified	1÷10	17	17	0,39		
	BE-4720	5/2	2	electric amplified	electric amplified	1÷10	18	18	0,64		
	BE-5720	5/2	3	electric amplified	electric amplified	1÷10	26	26	1,04		
	BE-6720	5/2	4	electric amplified	electric amplified	1÷10	27	27	1,21		
	BE-3730	5/2	1	electric amplified	electric unamplified (differential)	1,8÷10	17	28	0,39		
	BE-4730	5/2	2	electric amplified	electric unamplified (differential)	1,8÷10	18	25	0,64		
	BE-5730	5/2	3	electric amplified	electric unamplified (differential)	2,5÷10	26	46	1,04		
	BE-6730	5/2	4	electric amplified	electric unamplified (differential)	2,5÷10	27	42	1,21		
	BE-3900	5/3 O.C.	1	electric amplified	electric amplified	2,3÷10	17	25	0,39		
	BE-4900	5/3 O.C.	2	electric amplified	electric amplified	2,5÷10	18	27	0,64		
BE-5900	5/3 O.C.	3	electric amplified	electric amplified	2,5÷10	26	50	1,04			
BE-6900	5/3 O.C.	4	electric amplified	electric amplified	2,5÷10	30	47	1,21			
BE-3940	5/3 C.C.	1	electric amplified	electric amplified	2,3÷10	17	25	0,39			
BE-4940	5/3 C.C.	2	electric amplified	electric amplified	2,5÷10	18	27	0,64			
BE-5940	5/3 C.C.	3	electric amplified	electric amplified	2,5÷10	26	50	1,04			
BE-6940	5/3 C.C.	4	electric amplified	electric amplified	2,5÷10	30	47	1,21			

O.C. = open centres C.C. = closed centres P.C. = pressurized centres

For manual version with button, add "U" to the end of the part number

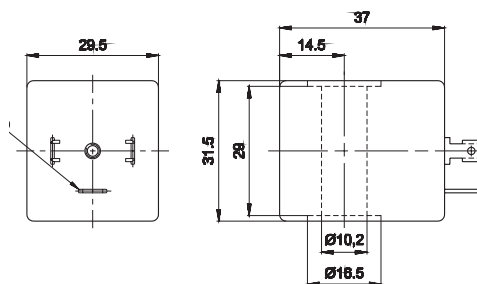
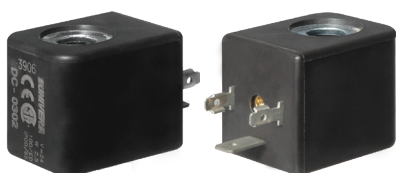
For version with manual override contact our Sales Department



DOUBLE ELECTRIC IMPULSE


	ISO 1	ISO 2	ISO 3	ISO 4
A	211	226	247	268
B	105	105	118	118
C	39	52	64	74
D	5	5	10	10
E	36	48	64	80
F	28	38	48	58
G	18	24	32	40
H	M5x38	M6x35	M8x50	M8x50
I	191	207	226	248
L	128	145	191	222
M	30	30	30	30

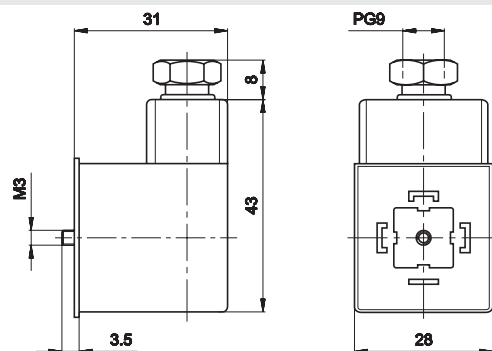
Z Two position manual control

U3 30 MM COIL TO BE USED WITH BE ELECTROPILOT


Code	Duty cycle ED (a) %	Power consumption W		Tolerance tension %	Rated voltage	Weight Kg
		Hold	Inrush			
DC-0301	100	2,5	2,5	±10	12 V DC	0,08
DC-0302	100	2,5	2,5	±10	24 V DC	0,08
DC-0307	100	3,3 VA (Max)	5 VA (Max)	±10	24 V AC/50-60 HZ	0,08
DC-0309	100	3,3 VA (Max)	5 VA (Max)	±10	110 V AC/50-60 HZ	0,08
DC-0310	100	3,3 VA (Max)	5 VA (Max)	±10	230 V AC/50-60 HZ	0,08

(a) Solenoid valves operating at 110 V–230 V must be built-in (EN 60204-1).

In continuous operation, the operating temperature does not affect the operation of the coil, provided that the unit is installed in a well-ventilated area.

CONNECTOR DIN 43650 FOR COIL SERIES U3


Code	Coil series	Protection according	Cable connection	Rotation on the coil
AM-5111	U3	IP65	PG9	360°

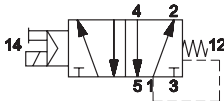
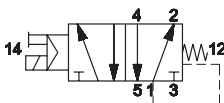
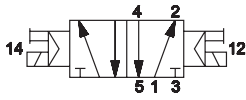
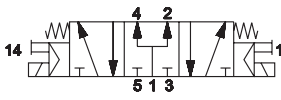
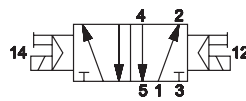
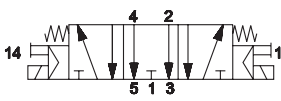
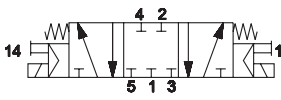
Available on request with indicator light

The solenoid valves are supplied without coil and connector.

The use of pneumatic components in the automotive sector, combined with electrical components, has made it possible to create a traditional ISO valve paired with a centrally positioned M12 electrical connector, for both single and double electrical control valves.

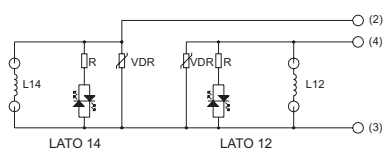
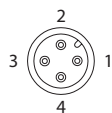
The models come with a 24 V DC coil as standard. Other supply voltages (up to 48 V DC) are available on request.

ELECTRIC IMPULSE

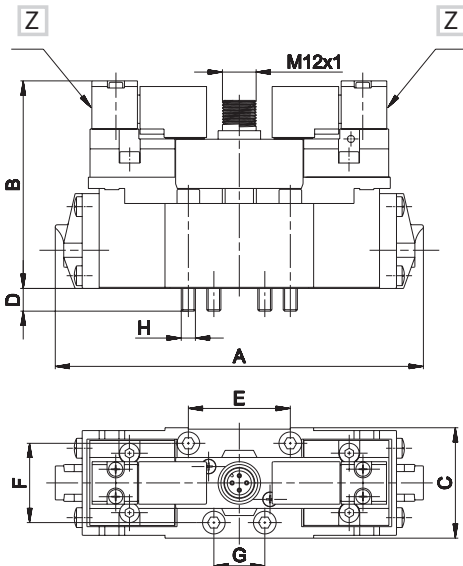
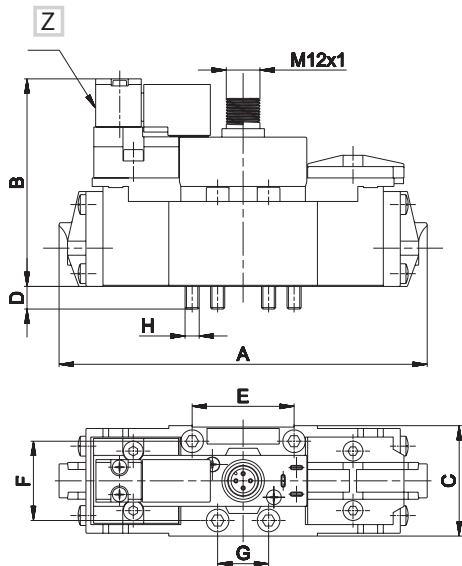
	Code	Way	Size ISO	Control 14	Return 12	Pressure bar	Response Time (ms) En.	De-en.	Weight kg	
	MIXED SYSTEM									
	BE12-3000	5/2	1	electric amplified	electric amplified	2÷9	18	29	0,45	
	BE12-4000	5/2	2	electric amplified	electric amplified	2,3÷9	23	24	0,55	
	BE12-5000	5/2	3	electric amplified	electric amplified	2,5÷9	35	78	0,90	
	SPOOL SYSTEM									
	BE12-3700	5/2	1	electric amplified	electric unamplified (differential)	2÷9	19	32	0,45	
BE12-4700	5/2	2	electric amplified	electric unamplified (differential)	2,2÷9	23	28	0,55		
BE12-5700	5/2	3	electric amplified	electric unamplified (differential)	2,3÷9	36	82	0,90		
	MIXED SYSTEM									
	BE12-3020	5/2	1	electric amplified	electric amplified	1÷9	14	14	0,55	
	BE12-4020	5/2	2	electric amplified	electric amplified	1÷9	16	16	0,80	
	BE12-5020	5/2	3	electric amplified	electric amplified	1÷9	25	25	1,20	
	BE12-3205	5/3 P.C.	1	electric amplified	electric amplified	2÷9	45	23	0,55	
	BE12-4205	5/3 P.C.	2	electric amplified	electric amplified	2,3÷9	51	23	0,80	
	BE12-5205	5/3 P.C.	3	electric amplified	electric amplified	2,5÷9	119	40	1,20	
	SPOOL SYSTEM									
	BE12-3720	5/2	1	electric amplified	electric amplified	1÷9	15	15	0,55	
	BE12-4720	5/2	2	electric amplified	electric amplified	1÷9	17	17	0,80	
	BE12-5720	5/2	3	electric amplified	electric amplified	1÷9	29	29	1,20	
	BE12-3900	5/3 O.C.	1	electric amplified	electric amplified	2,3÷9	15	22	0,55	
	BE12-4900	5/3 O.C.	2	electric amplified	electric unamplified (differential)	2,5÷9	17	26	0,80	
	BE12-5900	5/3 O.C.	3	electric amplified	electric unamplified (differential)	2,5÷9	29	55	1,20	
BE12-3940	5/3 C.C.	1	electric amplified	electric unamplified (differential)	2,3÷9	15	22	0,55		
BE12-4940	5/3 C.C.	2	electric amplified	electric unamplified (differential)	2,5÷9	17	26	0,80		
BE12-5940	5/3 C.C.	3	electric amplified	electric amplified	2,5÷9	29	55	1,20		

O.C. = open centres C.C. = closed centres P.C. = pressurized centres

Valves are supplied with 24 V DC coil

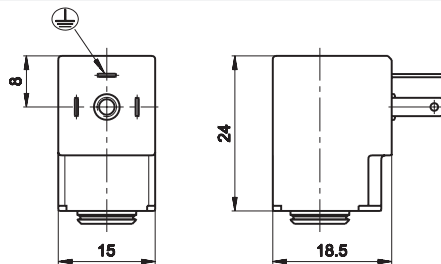
ELECTRIC CHARACTERISTICS


Central electric connector M12x1
 IP 65 protection degree
 24 V DC voltage
 2,5 W nominal power
 DD-052** series coil (without faston)
 ED 100%
 LED indicator

SINGLE ELECTRIC IMPULSE
DOUBLE ELECTRIC IMPULSE


	ISO 1	ISO 2	ISO 3
A	128	145	191
B	73	73	90
C	39	52	64
D	5	5	10
E	36	48	64
F	28	38	48
G	18	24	32
H	M5x38	M6x35	M8x50

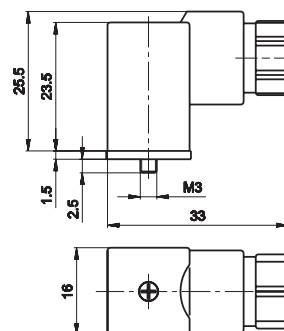
Z Single-position manual pushbutton control

U05 COIL – 15 MM FASTON TERMINAL, COMPATIBLE WITH BE12 PILOT SOLENOID


Code	Duty cycle ED (a) %	Power consumption W		Tolerance tension %	Rated voltage	Weight Kg
		Hold	Inrush			
DD-052	100	2,5	2,5	±10	24	0,019

Illuminated connectors available on request.

In continuous operation, the operating temperature does not affect the coil's performance, provided it is installed in a well-ventilated environment.

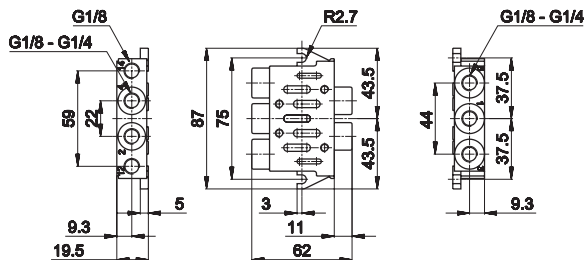
15 MM CONNECTOR FOR U05 SERIES COILS


Code	Coil series	Protection according	Cable connection	Rotation on the coil
AM-5109	U05	IP65	PG9	180°

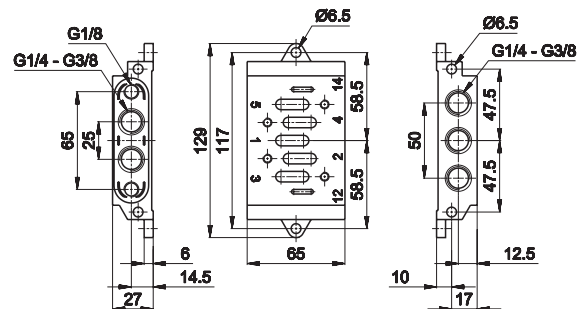
Available on request with indicator light

SINGLE SUB-BASE, SIDE CONNECTIONS

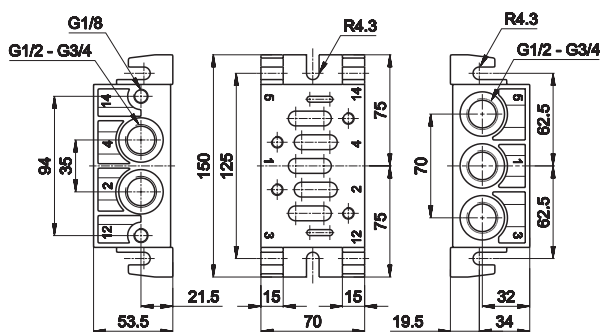
	Code	Size ISO	Note	Connection	Material	Weight kg
	BF-1060	1	in line connections	G1/8	Zamak	0,25
	BF-1061	1	in line connections	G1/4	Zamak	0,25
	BF-1150	2	in line connections	G1/4	Zamak	0,65
	BF-1151	2	in line connections	G3/8	Zamak	0,65
	BF-3060	3	in line connections	G1/2	Aluminium	0,74
	BF-3061	3	in line connections	G3/4	Aluminium	0,74
	BF-4060	4	in line connections	G3/4	Aluminium	1,28
	BF-4061	4	dorsal and side connections	G1	Aluminium	1,28

ISO 1


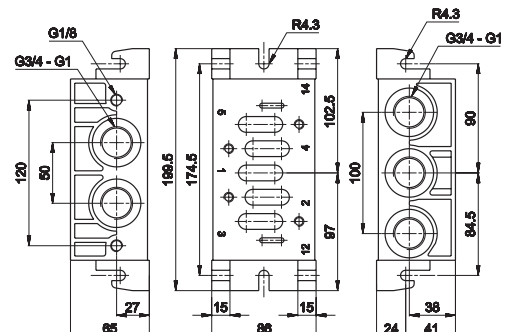
1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

ISO 2


1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

ISO 3


1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

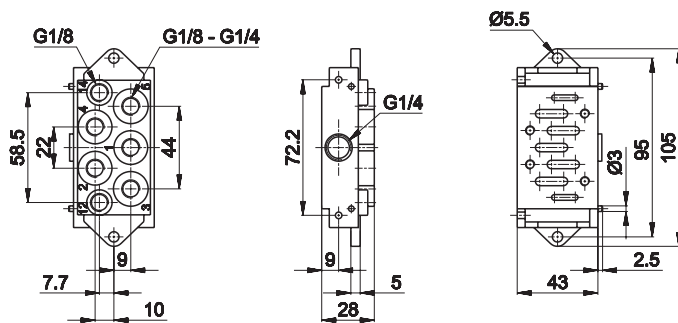
ISO 4


1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

SINGLE SUB-BASE, DORSAL CONNECTIONS

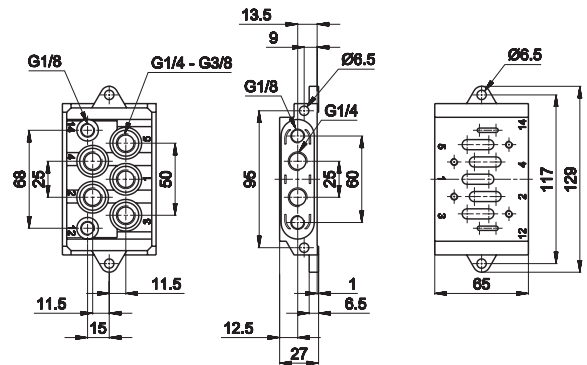
	Code	Size ISO	Note	Connection	Material	Weight kg
	BF-1062	1	dorsal connections	G1/8	Zamak	0,35
	BF-1063	1	dorsal connections	G1/4	Zamak	0,35
Single modular or Manifold sub-base, dorsal connections, separate exhausts Single assembly: close side ports (G1/8 - G1/4). Manifold assembly with common inlet: close dorsal connections n.1. With incorporated screws and seal						
	BF-1152	2	dorsal connections	G1/4	Zamak	0,65
	BF-1153	2	dorsal connections	G3/8	Zamak	0,65
	BF-3063	3	dorsal connections	G3/4	Aluminium	0,72
	BF-4062	4	dorsal connections	G3/4	Aluminium	1,24
	BF-4063	4	dorsal connections	G1	Aluminium	1,24

ISO 1



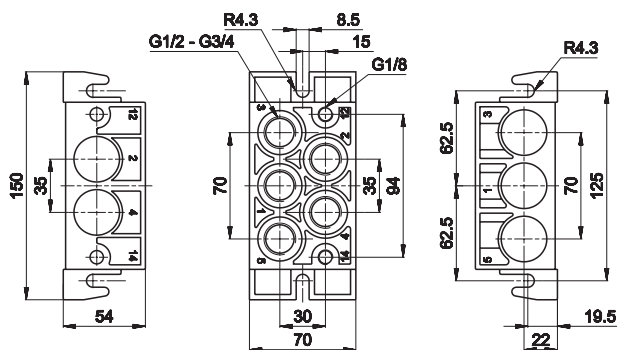
1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

ISO 2



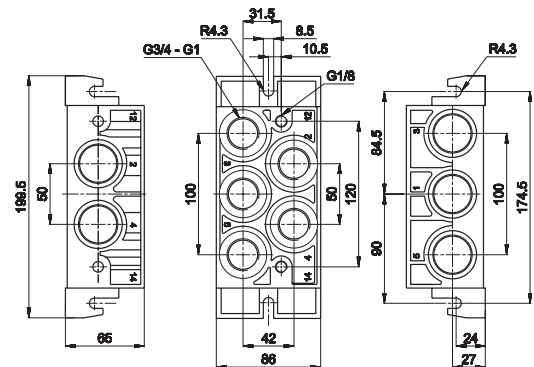
1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

ISO 3



1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

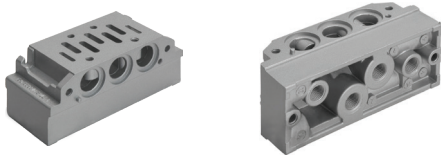
ISO 4



1= Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

ISO 1 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

	Code	Note	Connection	Material	Weight kg
MANIFOLD UNIVERSAL SYSTEM SUB-BASE, DORSAL AND SIDE CONNECTIONS, CONVEYED EXHAUSTS					



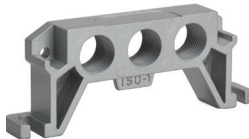
BF-1071	dorsal and side connections	G1/8	Aluminium	0,28
BF-1072	dorsal and side connections	G1/4	Aluminium	0,28
BF-1071S	side pneumatic impulses	G1/8	Aluminium	0,30
BF-1072S	side pneumatic impulses	G1/4	Aluminium	0,30

Dorsal and side connections possible. Close unused ports with caps. With incorporated screws, seals and caps included

MANIFOLD UNIVERSAL SYSTEM INLET PLATE



BF-1065	on top connections	G3/8	Zamak	0,35
BF-1066	dorsal connections	G3/8	Zamak	0,35



BF-1068	in line connections	G3/8	Aluminium	0,12
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When battery exceeds 4 units, the mounting of 2 plates is recommended Mixed version available upon request. With incorporated screws and seal

MANIFOLD UNIVERSAL SYSTEM DIAPHRAGM

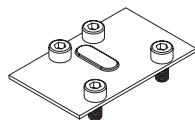


BF-1070	-	-	Zamak	0,09
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The diaphragm is not only the end plate of the manifold but it is also coupled with the exhaust regulator to separate two sub-bases and regulate the valves independently. In this case break the central blind hole.

To get two or more pressures, break the two side blind holes.

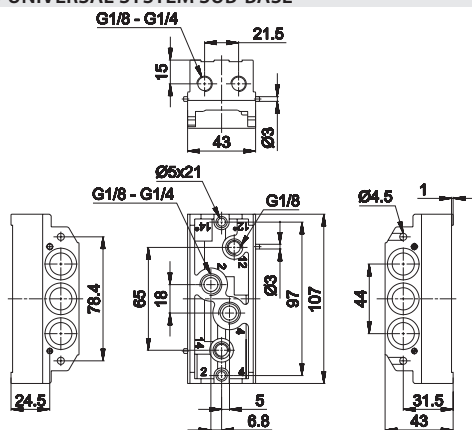
CLOSING PLATE FOR SUB-BASE 1



BF-1085	-	-	Steel	0,03
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(for all sub-base versions)

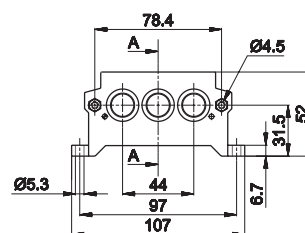
MANIFOLD UNIVERSAL SYSTEM SUB-BASE



1= Supply port
2 - 4 = Use
3 - 5= Exhaust

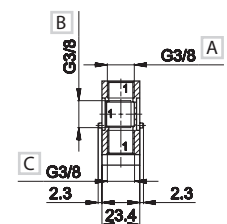
12 - 14 = Pilots
12* - 14* = Sideways Pilots

MANIFOLD UNIVERSAL SYSTEM INLET PLATE



1= Supply port
3 - 5= Exhausts

Section A-A

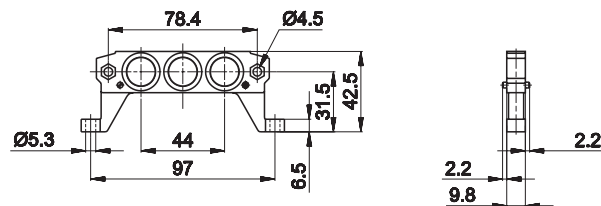
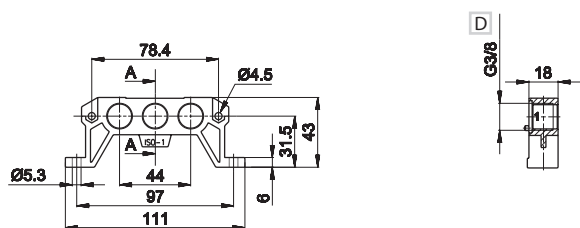


A On top connections
B In line connections
C Dorsal connetions

UNIVERSAL MANIFOLD IN-LINE SYSTEM INLET PLATE

MANIFOLD UNIVERSAL SYSTEM DIAPHRAGM

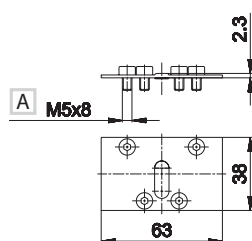
Sezione A-A



1= Supply port
3 - 5= Exhaust

D Outlets in-line only

CLOSING PLATE FOR SUB-BASE 1

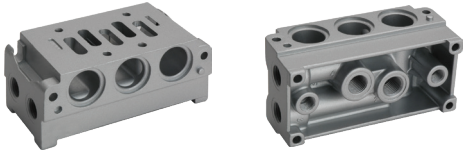


A ISO 4762

ISO 2 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

	Code	Note	Connection	Material	Weight kg
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UNIVERSAL MANIFOLD BASE WITH REAR AND SIDE OUTLETS FOR CHANNELLED EXHAUSTS



BF-1160	dorsal and side connections	G1/4	Zamak	0,80
BF-1161	dorsal and side connections	G3/8	Zamak	0,80

Dorsal and side connections possible. Close unused ports with caps. With incorporated screws, seals and caps included

MANIFOLD UNIVERSAL SYSTEM INLET PLATE



BF-1154	in line connections	G1/2	Zamak	0,46
BF-1155	in line connections	G1/2	Zamak	0,46

When battery exceeds 4 units, the mounting of 2 plates is recommended Mixed version available upon request. With incorporated screws and seal

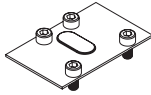
UNIVERSAL MANIFOLD DIAPHRAGM



BF-1162	-	-	Zamak	0,16
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The diaphragm is not only the end plate of the manifold but it is also coupled with the exhaust regulator to separate two sub-bases and regulate the valves independently. In this case break the central blind hole.
To get two or more pressures, break the two side blind holes.

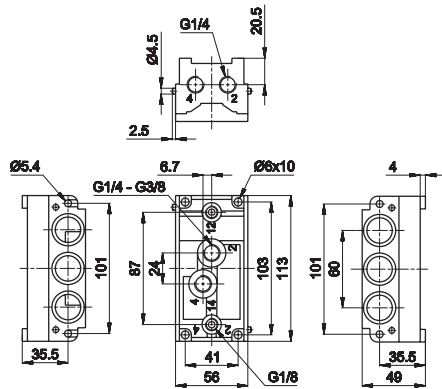
CLOSING PLATE FOR SUB-BASE



BF-1175	-	-	Steel	0,05
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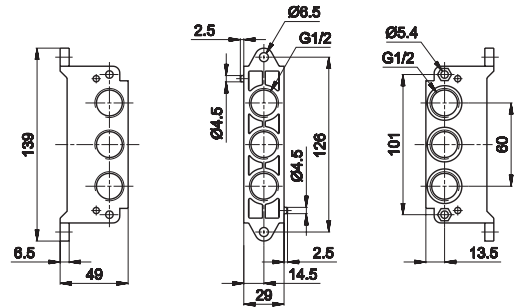
(for all sub-base versions)

MANIFOLD UNIVERSAL SYSTEM SUB-BASE

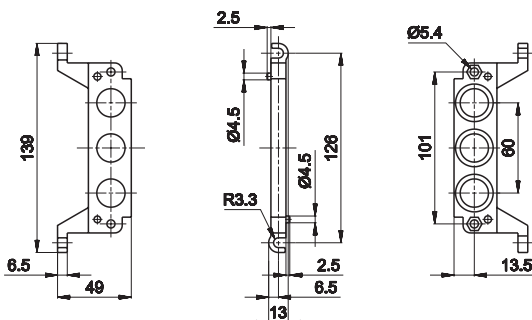


1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

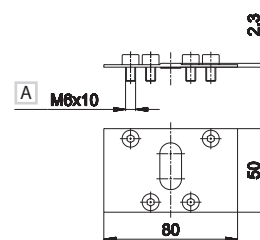
MANIFOLD UNIVERSAL SYSTEM INLET PLATE



UNIVERSAL MANIFOLD DIAPHRAGM



CLOSING PLATE FOR SUB-BASE 2



ISO 3 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

		Code	Note	Connection	Material	Weight kg
MANIFOLD UNIVERSAL SYSTEM SUB-BASE, DORSAL AND SIDE CONNECTIONS, CONVEYED EXHAUSTS						
	BF-3071	dorsal and side connections	G1/2	Aluminium	1,10	
	BF-3072	dorsal and side connections	G3/4	Aluminium	1,10	

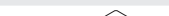
Dorsal and side connections possible. Close unused ports with caps. With incorporated screws, seals and caps included

MANIFOLD UNIVERSAL SYSTEM INLET PLATE

	BF-3064	in line connections	G1	Aluminium	0,44
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When battery exceeds 4 units, the mounting of 2 plates is recommended. Mixed version available upon request. With incorporated screws and seals

CLOSING PLATE FOR SUB-BASE

	BF-3175		-	-	Aluminium	0,08

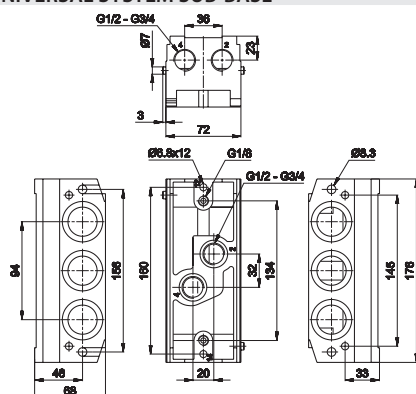
(for all sub-base versions)

UNIVERSAL SYSTEM CAP

	BF-3082	-	-	Aluminium	0,02
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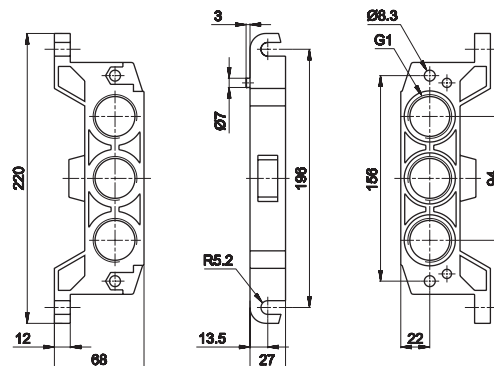
To be used to reach two pressures

MANIFOLD UNIVERSAL SYSTEM SUB-BASE

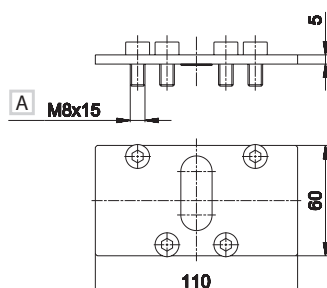


1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
12 - 14 = Pilots

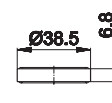
MANIFOLD UNIVERSAL SYSTEM INLET PLATE



CLOSING PLATE FOR SUB-BASE

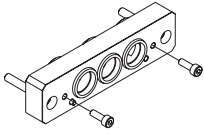


UNIVERSAL SYSTEM CAP



CONNECTION INTERFACE FOR UNIVERSAL BASE PLATES

	Code	Material	Weight kg
CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1 AND 2			



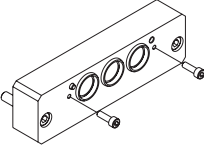
BF-1190

Aluminium

0,11

It allows the use of size 1 and 2 valves in one manifold with conveyed pressure and exhausts. (Upon request: pressure and/or exhausts separated)

CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 2 AND 3



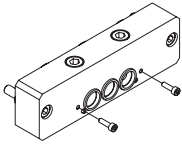
BF-3190

Aluminium

0,57

It allows the use of size 1 and 2 valves in one manifold with conveyed pressure and exhausts. (Upon request: pressure and/or exhausts separated)

CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1 AND 3



BF-3191

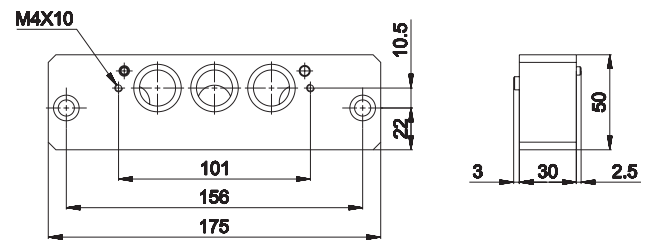
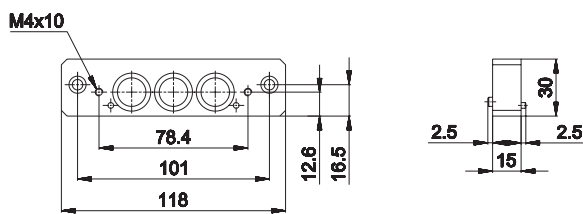
Aluminium

0,57

It allows the use of size 1 and 2 valves in one manifold with conveyed pressure and exhausts. (Upon request: pressure and/or exhausts separated)

CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1-2

CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 2-3



CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1-3

