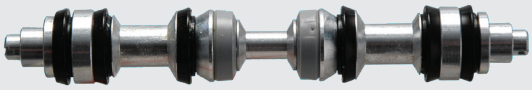
BE - STANDARDS-BASED VALVES ISO 5599/1

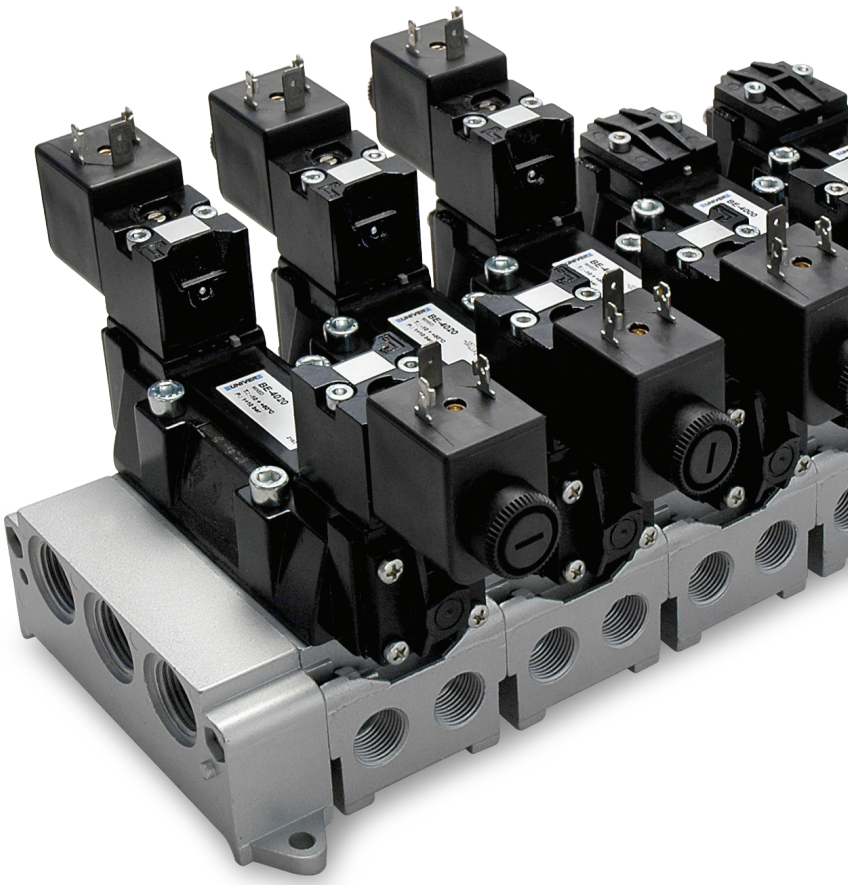
SPOOL

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 Nl/min

M12

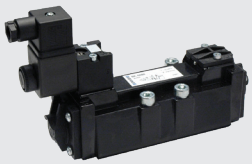
BE 4 - ISO 2

2300 Nl/min

M12

BE 5 - ISO 3

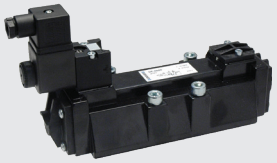
4200 Nl/min



M12

BE 6 - ISO 4

6600 Nl/min



ISO 5599/1 Valves

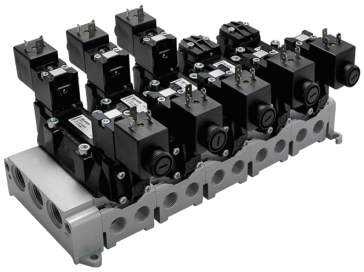
- Compliant with international ISO 5599/1 standards
- Complete range: sizes 1 - 2 - 3 - 4
- Two switching systems available: mixed and spool type
- High flow rate
- Short internal stroke
- No lubrication required
- Version with M12 electrical connection for the Automotive industry (sizes 1 - 2 - 3)
- 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 (Nl/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

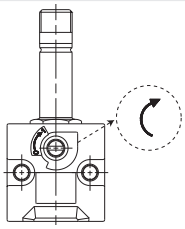
SPOOL
for all applications

Key

- Screwdriver adjustment
- Pressure applied with a tool
- Manual adjustment

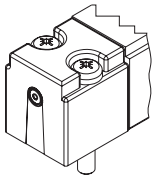
MANUAL CONTROL STANDARD

TWO-POSITION SCREWDRIVER



Standard **BE**

PRESSURE-OPERATED, 1 POSITION

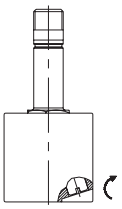


Standard **BE12**

MANUAL CONTROLS ON REQUEST

TWO-POSITION SCREWDRIVER

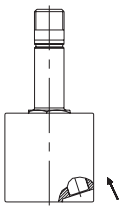
LETTER TO BE ADDED AT THE END OF THE ELECTROPILOT CODE



A
EXAMPLE:
BE-5150A

PRESSURE-OPERATED WITH TOOL

LETTER TO BE ADDED AT THE END OF THE ELECTROPILOT CODE

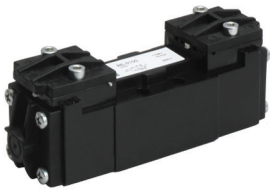


U
EXAMPLE:
BE-5150U

A LEVER

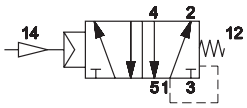
R
EXAMPLE:
BE-5150R

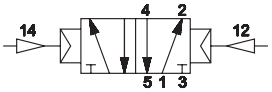
PNEUMATIC IMPULSE

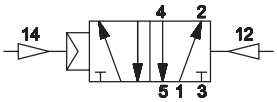


MIXED SYSTEM

BE-3100	5/2	ISO 1
BE-4100	5/2	ISO 2
BE-5100	5/2	ISO 3
BE-6100	5/2	ISO 4
BE-3150	5/2	ISO 1
BE-4150	5/2	ISO 2
BE-5150	5/2	ISO 3
BE-6150	5/2	ISO 4
BE-3170	5/2	ISO 1
BE-4170	5/2	ISO 2
BE-5170	5/2	ISO 3
BE-6170	5/2	ISO 4

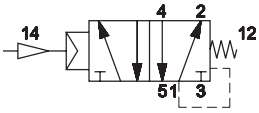


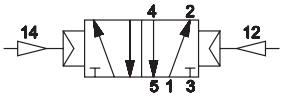


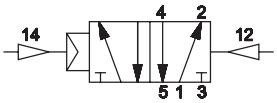


SPOOL SYSTEM

BE-3800	5/2	ISO 1
BE-4800	5/2	ISO 2
BE-5800	5/2	ISO 3
BE-6800	5/2	ISO 4
BE-3850	5/2	ISO 1
BE-4850	5/2	ISO 2
BE-5850	5/2	ISO 3
BE-6850	5/2	ISO 4
BE-3870	5/2	ISO 1
BE-4870	5/2	ISO 2
BE-5870	5/2	ISO 3
BE-6870	5/2	ISO 4



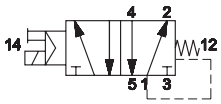


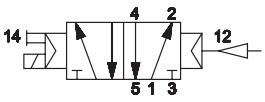


ELECTRICAL IMPULSE

MIXED SYSTEM

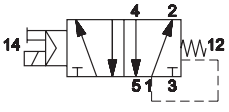
BE-3000	5/2	ISO 1
BE-4000	5/2	ISO 2
BE-5000	5/2	ISO 3
BE-6000	5/2	ISO 4
BE-3060	5/2	ISO 1
BE-4060	5/2	ISO 2
BE-5060	5/2	ISO 3
BE-6060	5/2	ISO 4

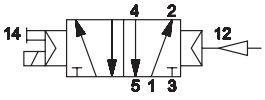




SPOOL SYSTEM

BE-3700	5/2	ISO 1
BE-4700	5/2	ISO 2
BE-5700	5/2	ISO 3
BE-6700	5/2	ISO 4
BE-3760	5/2	ISO 1
BE-4760	5/2	ISO 2
BE-5760	5/2	ISO 3
BE-6760	5/2	ISO 4

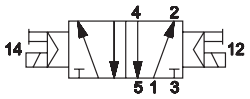
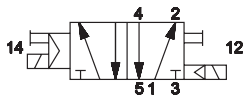
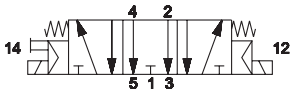
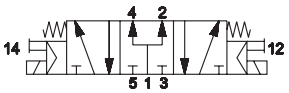




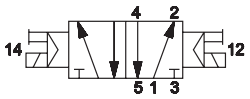
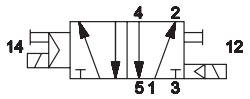
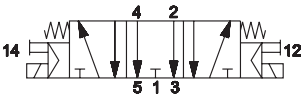
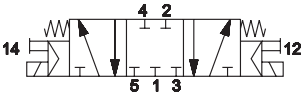
For versions with recessed button 1 position, add suffix U to part number
Solenoid valves are supplied without coil, connector.

DOUBLE ELECTRICAL IMPULSE

MIXED SYSTEM

BE-3020	5/2	ISO 1	
BE-4020	5/2	ISO 2	
BE-5020	5/2	ISO 3	
BE-6020	5/2	ISO 4	
BE-3030	5/2	ISO 1	
BE-4030	5/2	ISO 2	
BE-5030	5/2	ISO 3	
BE-6030	5/2	ISO 4	
BE-3200	5/3 O.C.	ISO 1	
BE-4200	5/3O.C.	ISO 2	
BE-5200	5/3 O.C.	ISO 3	
BE-6200	5/3 O.C.	ISO 4	
BE-3205	5/3 P.C.	ISO 1	
BE-4205	5/3 P.C.	ISO 2	
BE-5205	5/3 P.C.	ISO 3	
BE-6205	5/3 P.C.	ISO 4	

SPOOL SYSTEM

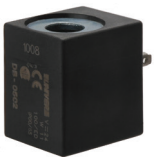
BE-3720	5/2	ISO 1	
BE-4720	5/2	ISO 2	
BE-5720	5/2	ISO 3	
BE-6720	5/2	ISO 4	
BE-3730	5/2	ISO 1	
BE-4730	5/2	ISO 2	
BE-5730	5/2	ISO 3	
BE-6730	5/2	ISO 4	
BE-3900	5/3 O.C.	ISO 1	
BE-4900	5/3 O.C.	ISO 2	
BE-5900	5/3 O.C.	ISO 3	
BE-6900	5/3 O.C.	ISO 4	
BE-3940	5/3 C.C.	ISO 1	
BE-4940	5/3 C.C.	ISO 2	
BE-5940	5/3 C.C.	ISO 3	
BE-6940	5/3 C.C.	ISO 4	

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

U3 30 MM COIL TO BE USED WITH BE ELECTROPILOT



DC-0301	12 V DC
DC-0302	24 V DC
DC-0307	24V AC - 50/60 Hz
DC-0309	110V AC - 50/60 Hz
DC-0310	230V AC - 50/60 Hz

CONNECTOR DIN 43650 FOR COIL SERIES U3

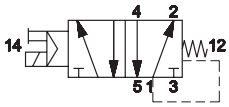
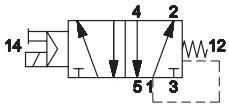
AM-5111

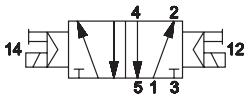
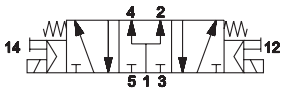
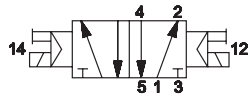
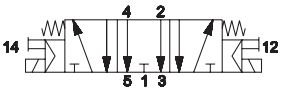
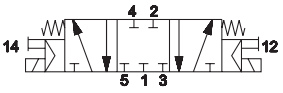
IP65 protection rating. PG9 cable connection.
360° orientation on the coil.

Available on request with LED indicator light.

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

MIXED SYSTEM			
BE12-3000	5/2	ISO 1	
BE12-4000	5/2	ISO 2	
BE12-5000	5/2	ISO 3	
SPOOL SYSTEM			
BE12-3700	5/2	ISO 1	
BE12-4700	5/2	ISO 2	
BE12-5700	5/2	ISO 3	

MIXED SYSTEM			
BE12-3020	5/2	ISO 1	
BE12-4020	5/2	ISO 2	
BE12-5020	5/2	ISO 3	
BE12-3205	5/3 **P.C.**	ISO 1	
BE12-4205	5/3 **P.C.**	ISO 2	
BE12-5205	5/3 **P.C.**	ISO 3	
SPOOL SYSTEM			
BE12-3720	5/2	ISO 1	
BE12-4720	5/2	ISO 2	
BE12-5720	5/2	ISO 3	
BE12-3900	5/3 **O.C.**	ISO 1	
BE12-4900	5/3 **O.C.**	ISO 2	
BE12-5900	5/3 **O.C.**	ISO 3	
BE12-3940	5/3 **C.C.**	ISO 1	
BE12-4940	5/3 **C.C.**	ISO 2	
BE12-5940	5/3 **C.C.**	ISO 3	

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

Valves are supplied with 24 V DC coil

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

DD-052	24 V	Illuminated connectors available on request.

15 MM CONNECTOR FOR U05 SERIES COILS

AM-5109	IP65 protection rating. PG9 cable connection. 180° orientation on the coil. Illuminated connectors available on request.

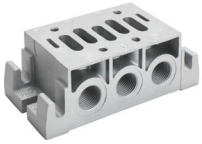
For versions with recessed button 1 position, add suffix U to part number

Solenoid valves are supplied without coil, connector.

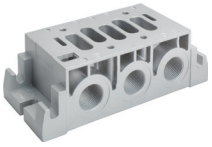
SINGLE SUB-BASE, SIDE CONNECTIONS

BF-1060	ISO 1
BF-1061	ISO 1

BF-1150	ISO 2
BF-1151	ISO 2

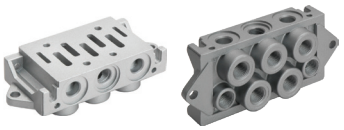


BF-3060	ISO 3
BF-3063	ISO 3



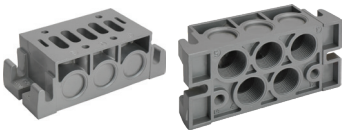
BF-4062	ISO 4
BF-4063	ISO 4

SINGLE SUB-BASE, DORSAL CONNECTIONS

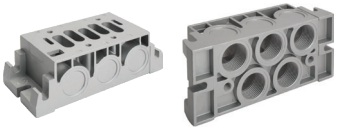


BF-1062	ISO 1
BF-1063	ISO 1

BF-1152	ISO 2
BF-1153	ISO 2

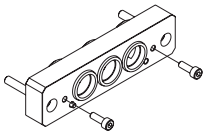


BF-3061	ISO 3



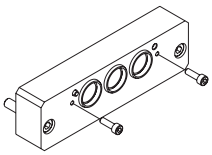
BF-4060	ISO 4
BF-4061	ISO 4

CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1 AND 2



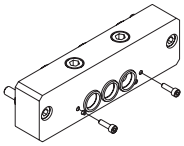
BF-1190

CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 2 AND 3



BF-3190

CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1 AND 3



BF-3191

ISO 1 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

MANIFOLD UNIVERSAL SYSTEM SUB-BASE, DORSAL AND SIDE CONNECTIONS, CONVEYED EXHAUSTS

BF-1071	G1/8
BF-1072	G1/4
BF-1071S	G1/8
BF-1072S	G1/4

MANIFOLD UNIVERSAL SYSTEM INLET PLATE

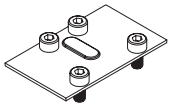
BF-1065	G3/8
BF-1066	G3/8

BF-1068 G3/8

MANIFOLD UNIVERSAL SYSTEM DIAPHRAGM

BF-1070

CLOSING PLATE FOR SUB-BASE 1



BF-1085-

ISO 3 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

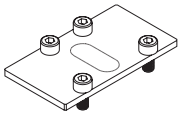
MANIFOLD UNIVERSAL SYSTEM SUB-BASE, DORSAL AND SIDE CONNECTIONS, CONVEYED EXHAUSTS

BF-3071	G1/2
BF-3072	G3/4

MANIFOLD UNIVERSAL SYSTEM INLET PLATE

BF-3064 G1

CLOSING PLATE FOR SUB-BASE



BF-3175

UNIVERSAL SYSTEM CAP

BF-3082

ISO 2 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

UNIVERSAL MANIFOLD BASE WITH REAR AND SIDE OUTLETS FOR CHANNELLED EXHAUSTS

BF-1160	G1/4
BF-1161	G3/8

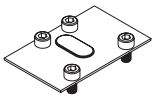
MANIFOLD UNIVERSAL SYSTEM INLET PLATE

BF-1154	G1/2
BF-1155	G1/2

UNIVERSAL MANIFOLD DIAPHRAGM

BF-1162

CLOSING PLATE FOR SUB-BASE



BF-1175