

Operating data		
Flow factor		Cv = 1.1
Flow rate at 6 bar with 1 bar pressure drop		1100 l/min
Operating pressure - Air		2 to 12 bar
Operating pressure - Oil (option)		2 to 12 bar (option to 17 bar)
Minimum pilot pressure (Air or Oil)		1.8 bar
Ambient operating temperature range		-20°C to + 80°C (Nitrile seals) -10°C to + 150°C (Viton® seals) -25°C to + 240°C (Perfluoroelastomer seals)
Type of connection		Screwthread
Port size - Body		G1/4"
Port size - Pilot		G1/8"
Materials of construction	Body and end caps Spool Spacer Guides Springs Fastenings Seals	Black anodised Aluminium 316 Stainless steel Polysulphone (Aluminium for Viton® seals) Brass Stainless steel A4 stainless steel Nitrile, Viton® or Perfluoroelastomer
Operating medium - Body		Compressed air, filtered, unlubricated or lubricated with ISO VG 32 mineral oil. Low pressure hydraulic oil.
Operating medium - Pilot		Compressed air, filtered, unlubricated or lubricated with ISO VG 32 mineral oil, or low pressure hydraulic oil
Installation dimensions		see page HDB2.1.2
Mounting		Body mounting
Service kits (spring included)		3 port, Nitrile seals - SKB11N 3 port, Viton® seals - SKB11V 5 port, Nitrile seals - SKB15N 5 port, Viton® seals - SKB15V

BALDWIN HD RANGE SPOOL VALVES

3/2 and 5/2

G1/4

Body Ported

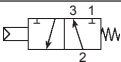
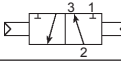
Pilot
operated

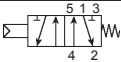
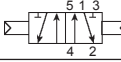
Suitable for Air, or Oil

Body Ported

High Flow

External pilot operated

Preferred models - 3/2			
Model No	Description	Mass kg	Symbol
B2B3PG009N5	G1/4" 3 port, 2 position, pilot operated, spring return	0.90	
B2B3PG172N5	G1/4" 3 port, 2 position, pilot operated, pilot return	0.90	

Preferred models - 5/2			
Model No	Description	Mass kg	Symbol
B2B5PG009N5	G1/4" 5 port, 2 position, pilot operated, spring return.	1.20	
B2B5PG172N5	G1/4" 5 port, 2 position, pilot operated, pilot return	1.20	

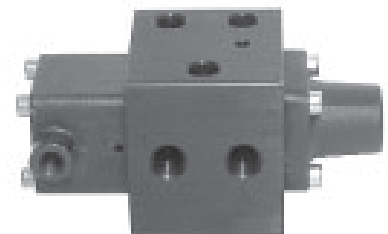
OPTIONS

Position 5 - Valve function
Replace 'P' with
'H' for Hydraulic

Position 10 - Seal material
For Viton®
replace 'N' with 'V'
For Perfluoroelastomer
replace 'N' with 'D'
Other materials available
Details on request

Position 11 - Body material
Other materials include
Brass (4)

Position 6 - Thread type
NPT(N) and metric threads(M)
available

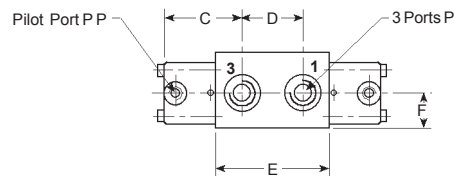
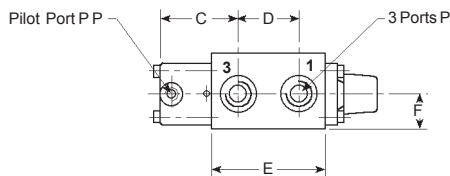
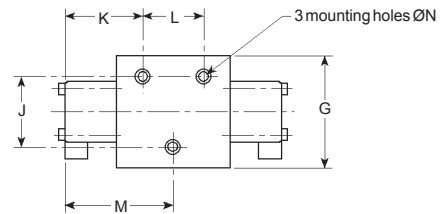
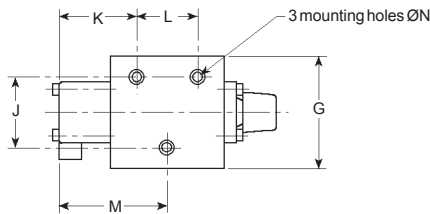
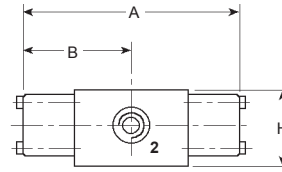
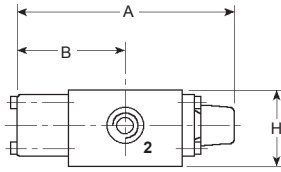


DAVIS

Installation dimensions in mm

3/2 pilot operated, spring return

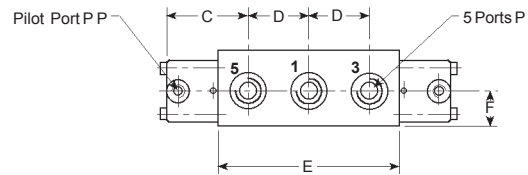
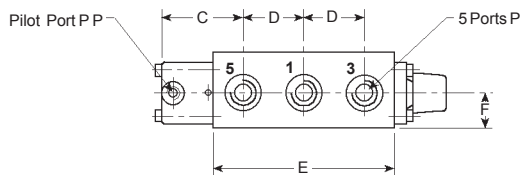
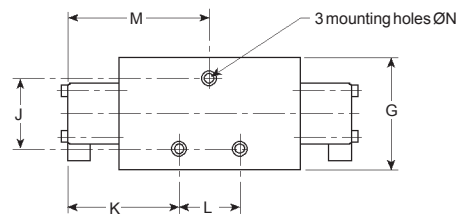
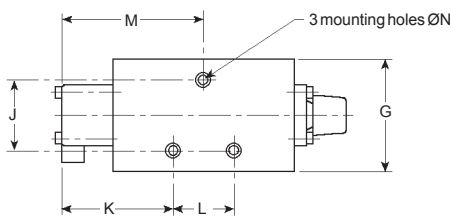
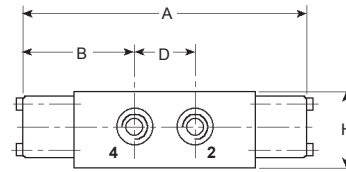
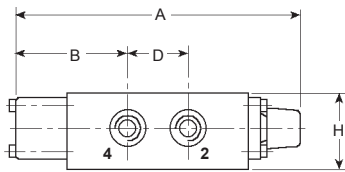
3/2 double pilot operated



Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	PP
B2B3PG009N5	129	64	50	27	56	23	64	51	42	50	27	64	6.6	G1/4	G1/8
B2B3PG172N5	128	64	50	27	56	23	64	51	42	50	27	64	6.6	G1/4	G1/8

5/2 pilot operated, spring return

5/2 double pilot operated



Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	PP
B2B5PG009N5	156	64	50	27	83	23	64	51	42	64	27	77	6.6	G1/4	G1/8
B2B5PG172N5	155	64	50	27	83	23	64	51	42	64	27	77	6.6	G1/4	G1/8

Operating data

Flow factor	Cv = 1.1	
Flow rate at 6 bar with 1 bar pressure drop	1100 l/min	
Operating pressure - Air	2 to 10 bar	
Ambient operating temperature range	-20°C to + 80°C (Nitrile seals) -10°C to + 150°C (Viton® seals)	
Type of connection	Screwthread	
Port size - Body	G1/4"	
Materials of construction	Body and end caps Spool Spacer Guides Springs Fastenings Seals	Black anodised Aluminium 316 Stainless steel Polysulphone (Aluminium for Viton® seals) Brass Stainless steel A4 stainless steel Nitrile or Viton®
Operating medium - Body	Compressed air, filtered, unlubricated or lubricated with ISO VG 32 mineral oil.	
Installation dimensions	see page HDB2.2.2	
Mounting	Body mounting	
Service kits (spring included)	3 port, Nitrile seals - SKB11N 3 port, Viton® seals - SKB11V 5 port, Nitrile seals - SKB15N 5 port, Viton® seals - SKB15V	
Solenoid Coils	see page HDB2.2.2	

BALDWIN HD RANGE SPOOL VALVES

3/2 and 5/2

G1/4

Body Ported



Solenoid
operated

High Flow

Solenoid operated
(Internal pilot)

Interchangeable CNOMO
interface coils



ATEX approved
hazardous area
options

Preferred models - 3/2

Model No	Description	Mass kg	Symbol
B2B3PG011N5+0*	G1/4" 3 port, 2 position, solenoid operated, spring return.	1.20	
B2B3PG011N5+S*	G1/4" 3 port, 2 position, solenoid operated, spring return with manual override	1.21	
B2B3PG012N5+0*	G1/4" 3 port, 2 position double solenoid operated	1.50	
B2B3PG012N5+S*	G1/4" 3 port, 2 position double solenoid operated with manual override	1.50	

Preferred models - 5/2

Model No	Description	Mass kg	Symbol
B2B5PG011N5+0*	G1/4" 5 port, 2 position, solenoid operated, spring return.	1.50	
B2B5PG011N5+S*	G1/4" 5 port, 2 position, solenoid operated, spring return with manual override	1.50	
B2B5PG012N5+0*	G1/4" 5 port, 2 position double solenoid operated	1.75	
B2B5PG012N5+S*	G1/4" 5 port, 2 position, double solenoid operated with manual override	1.75	

OPTIONS

Position 6 - Thread type
NPT(N) and metric threads(M)
available

+ = Coil Options (position 12)
Code P = Plug & socket (standard)
Code A = Type EExia
Code D = Type EEExd
Code 9 = Type EEExme
Code N = Type ExN

* = **Coil Voltage (position 14)**
Standard Voltages
Code A = 12v DC
Code B = 24v DC
Code T = 110v AC (50/60 Hz)
Code N = 220v AC (50/60 Hz)
Code U = 240v AC (50/60Hz)

Other voltages
- details on request

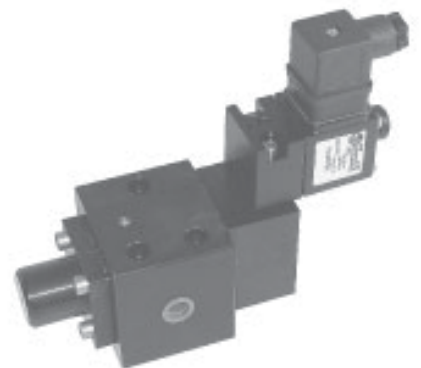
Position 10 - Seal material
For Viton® replace 'N' with 'V'
Other materials available
Details on request

Manual override options
(position 13)
Code S = Screwdriver (standard)
Code C = Manual lever
Code D = Push button
Code 1 = Tamperproof

Note: All hazardous area coils
are ATEX approved
details on request

Position 11 - Body material
Other materials include
Brass (4)

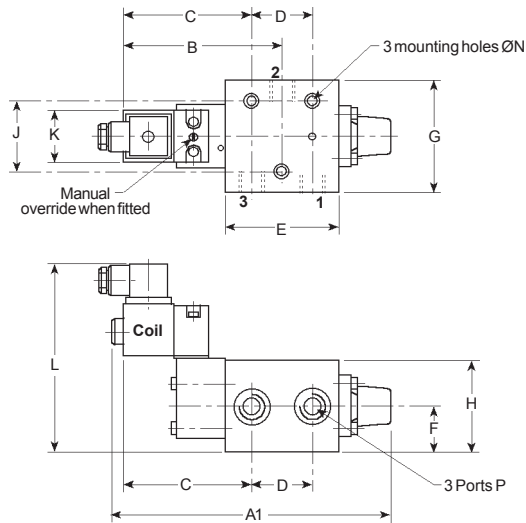
For details see page HDB2.2.2



DAVIS

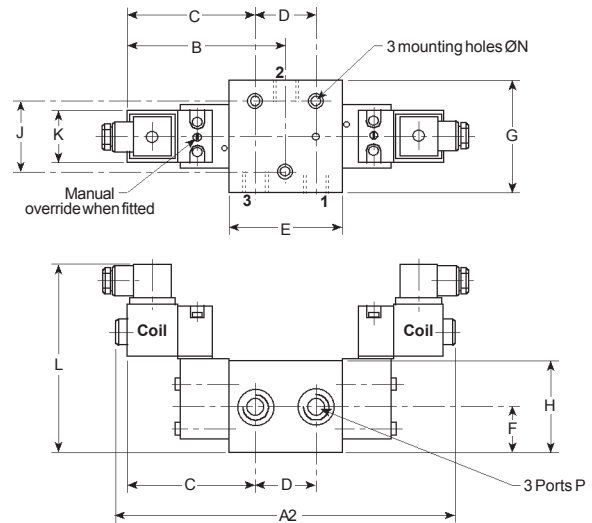
Installation dimensions in mm

3/2 single solenoid, spring return



Model	D	E	F	G	H	J	N	P
B2B3PG011N5+ --	27	56	32	64	64	42	6.6	G1/4
B2B3PG012N5+ --	27	56	32	64	64	42	6.6	G1/4

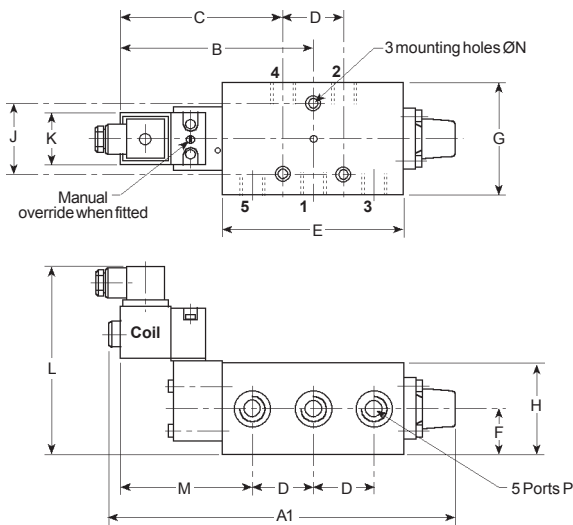
3/2 double solenoid



Coil type	A1	A2	B	C	K	L
Plug & Socket	175	221	102	88	35	130
ExN	175	221	102	88	35	122
EExd	205	251	117	103	52	137
EExia	191	237	110	96	35	122
EExme	163	209	96	82	35	126

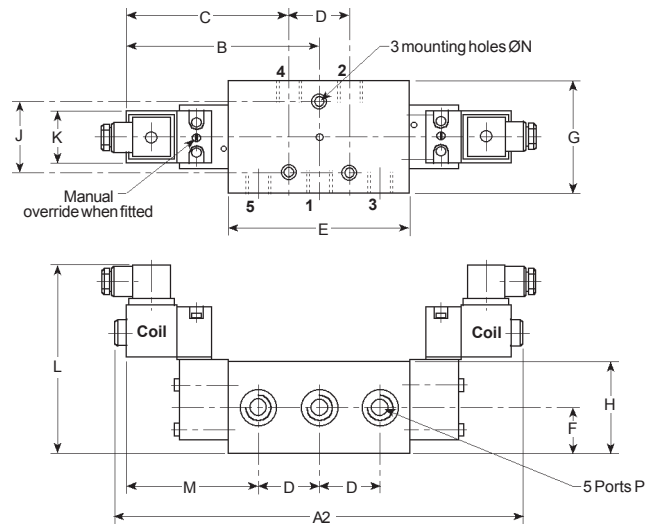


5/2 single solenoid, spring return



Model	D	E	F	G	H	J	N	P
B2B5PG011N5+ --	27	83	32	64	64	42	6.6	G1/4
B2B5PG012N5+ --	27	83	32	64	64	42	6.6	G1/4

5/2 double solenoid



Coil type	A1	A2	B	C	K	L	M
Plug & Socket	202	248	115	102	35	130	88
ExN	202	248	115	102	35	122	88
EExd	232	278	130	117	52	137	103
EExia	218	264	123	110	35	122	96
EExme	190	236	109	96	35	126	82



Coil options

Coil Code	ATEX Approved	Coil Type	Area Class	Area Category	Ingress Protection	Cable Entry	Ambient Temperature	Coil Class
P	No	Plug & Socket	Safe	N/A	IP65	PG.9	-10°C to 60°C	F
L	No	Plug & Socket with LED	Safe	N/A	IP65	PG.9	-10°C to 60°C	F
N	Yes	ExN	Zone 2	ExN IIT4/T6	IP65	M20 x 1.5	-10°C to 40°C	F
D	Yes	EExd	Zones 1 & 2	EExd IIC T4/T6	IP66	M20 x 1.5	-10°C to 40°C	F
9	Yes	EExme	Zones 1 & 2	EExd IIC T5	IP65	Flying leads	-10°C to 65°C	F
A	Yes	EExia	Zones 0, 1 & 2	EExia IIC T6	IP65	M20 x 1.5	-10°C to 65°C	F

Operating data

Flow factor	Cv = 4.5														
Flow rate at 6 bar with 1 bar pressure drop	4550 l/min														
Operating pressure - Air	2 to 12 bar														
Operating pressure - Oil (option)	2 to 12 bar (option to 17 bar)														
Minimum pilot pressure (Air or Oil)	1.8 bar														
Ambient operating temperature range	-20°C to + 80°C (Nitrile seals) -10°C to + 150°C (Viton® seals) -25°C to + 240°C (Perfluoroelastomer seals)														
Type of connection	Screwthread														
Port size - Body	G1/2"														
Port size - Pilot	G1/8"														
Materials of construction	<table border="0"> <tr> <td>Body and end caps</td> <td>Black anodised Aluminium</td> </tr> <tr> <td>Spool</td> <td>316 Stainless steel</td> </tr> <tr> <td>Spacer</td> <td>Polysulphone (Aluminium for Viton® seals)</td> </tr> <tr> <td>Guides</td> <td>Brass</td> </tr> <tr> <td>Springs</td> <td>Stainless steel</td> </tr> <tr> <td>Fastenings</td> <td>A4 stainless steel</td> </tr> <tr> <td>Seals</td> <td>Nitrile, Viton® or Perfluoroelastomer</td> </tr> </table>	Body and end caps	Black anodised Aluminium	Spool	316 Stainless steel	Spacer	Polysulphone (Aluminium for Viton® seals)	Guides	Brass	Springs	Stainless steel	Fastenings	A4 stainless steel	Seals	Nitrile, Viton® or Perfluoroelastomer
Body and end caps	Black anodised Aluminium														
Spool	316 Stainless steel														
Spacer	Polysulphone (Aluminium for Viton® seals)														
Guides	Brass														
Springs	Stainless steel														
Fastenings	A4 stainless steel														
Seals	Nitrile, Viton® or Perfluoroelastomer														
Operating medium - Body	Compressed air, filtered, unlubricated or lubricated with ISO VG 32 mineral oil. Low pressure hydraulic oil.														
Operating medium - Pilot	Compressed air, filtered, unlubricated or lubricated with ISO VG 32 mineral oil, or low pressure hydraulic oil														
Installation dimensions	see page HDB4.1.2														
Mounting	Body mounting														
Service kits (spring included)	3 port, Nitrile seals - SKB11N 3 port, Viton® seals - SKB11V 5 port, Nitrile seals - SKB15N 5 port, Viton® seals - SKB15V														

BALDWIN HD RANGE SPOOL VALVES

3/2 and 5/2

G1/2

Body Ported

Pilot
operated

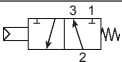
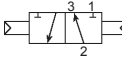
Suitable for Air, or Oil

Body Ported

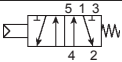
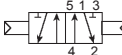
High Flow

External pilot operated

Preferred models - 3/2

Model No	Description	Mass kg	Symbol
B4B3PG009N5	G1/2" 3 port, 2 position, pilot operated, spring return	1.50	
B4B3PG172N5	G1/2" 3 port, 2 position, pilot operated, pilot return	1.50	

Preferred models - 5/2

Model No	Description	Mass kg	Symbol
B4B5PG009N5	G1/2" 5 port, 2 position, pilot operated, spring return.	1.60	
B4B5PG172N5	G1/2" 5 port, 2 position, pilot operated, pilot return	1.60	

OPTIONS

Position 5 - Valve function
Replace 'P' with
'H' for Hydraulic

Position 10 - Seal material
For Viton®
replace 'N' with 'V'
For Perfluoroelastomer
replace 'N' with 'D'
Other materials available
Details on request

Position 11 - Body material
Other materials include
Brass (4)

Position 6 - Thread type
NPT(N) and metric threads(M)
available

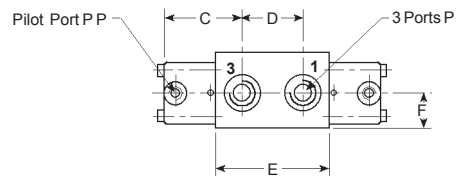
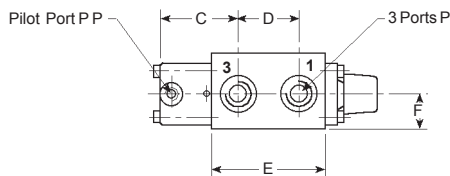
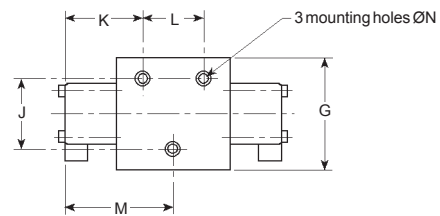
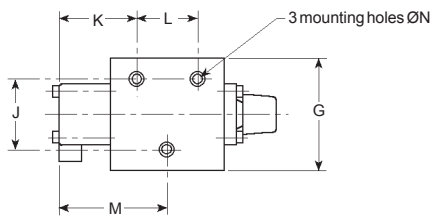
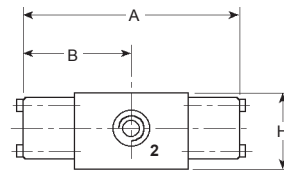
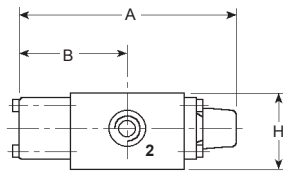


DAVIS

Installation dimensions in mm

3/2 pilot operated, spring return

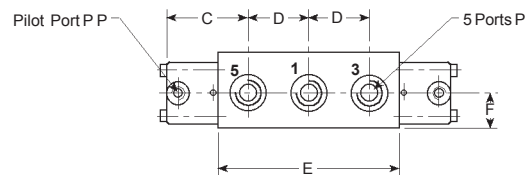
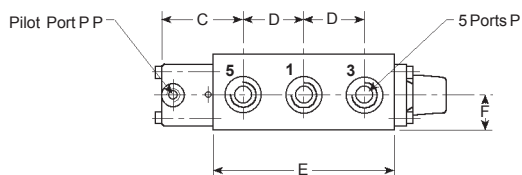
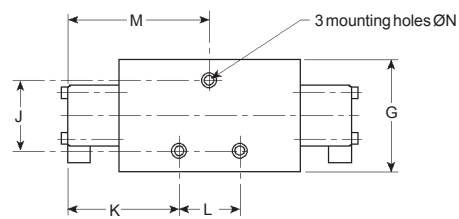
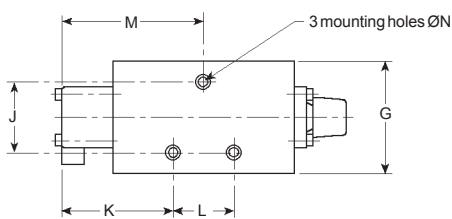
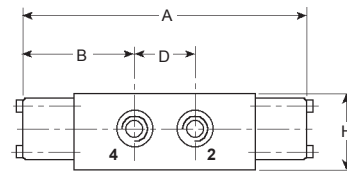
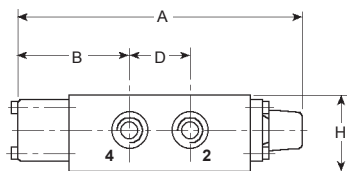
3/2 double pilot operated



Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	PP
B4B3PG009N5	150	75	54	41	78	23	76	51	48	54	41	75	6.6	G1/2	G1/8
B4B3PG172N5	149	75	54	41	78	23	76	51	48	54	41	75	6.6	G1/2	G1/8

5/2 pilot operated, spring return

5/2 double pilot operated



Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	PP
B4B5PG009N5	191	75	54	41	119	23	76	51	48	75	41	95	6.6	G1/2	G1/8
B4B5PG172N5	190	64	54	41	119	23	76	51	48	75	41	95	6.6	G1/2	G1/8

BALDWIN HD RANGE SPOOL VALVES

3/2 and 5/2

G1/2

Body Ported

Solenoid
operated



High Flow

Solenoid operated
(Internal pilot)

Interchangeable CNOMO
interface coils



ATEX approved
hazardous area
options

Operating data	
Flow factor	Cv = 4.5
Flow rate at 6 bar with 1 bar pressure drop	4550 l/min
Operating pressure - Air	2 to 10 bar
Ambient operating temperature range	-20°C to + 80°C (Nitrile seals) -10°C to + 150°C (Viton® seals)
Type of connection	Screwthread
Port size - Body	G1/2"
Materials of construction	Body and end caps: Black anodised Aluminium Spool: 316 Stainless steel Spacer: Polysulphone (Aluminium for Viton® seals) Guides: Brass Springs: Stainless steel Fastenings: A4 stainless steel Seals: Nitrile or Viton®
Operating medium - Body	Compressed air, filtered, unlubricated or lubricated with ISO VG 32 mineral oil.
Installation dimensions	see page HDB4.2.2
Mounting	Body mounting
Service kits (spring included)	3 port, Nitrile seals - SKB11N 3 port, Viton® seals - SKB11V 5 port, Nitrile seals - SKB15N 5 port, Viton® seals - SKB15V
Solenoid Coils	see page HDB4.2.2

Preferred models - 3/2			
Model No	Description	Mass kg	Symbol
B4B3PG011N5+0*	G1/2" 3 port, 2 position, solenoid operated, spring return.	1.80	
B4B3PG011N5+S*	G1/2" 3 port, 2 position, solenoid operated, spring return with manual override	1.81	
B4B3PG012N5+0*	G1/2" 3 port, 2 position double solenoid operated	2.00	
B4B3PG012N5+S*	G1/2" 3 port, 2 position double solenoid operated with manual override	2.01	

Preferred models - 5/2			
Model No	Description	Mass kg	Symbol
B4B5PG011N5+0*	G1/2" 5 port, 2 position, solenoid operated, spring return.	1.90	
B4B5PG011N5+S*	G1/2" 5 port, 2 position, solenoid operated, spring return with manual override	1.91	
B4B5PG012N5+0*	G1/2" 5 port, 2 position double solenoid operated	2.10	
B4B5PG012N5+S*	G1/2" 5 port, 2 position, double solenoid operated with manual override	2.11	

OPTIONS

Position 6 - Thread type
NPT(N) and metric threads(M) available

+ = Coil Options (position 12)
Code P = Plug & socket (standard)
Code A = Type EExia
Code D = Type EExd
Code 9 = Type EExme
Code N = Type ExN

* = **Coil Voltage (position 14)**
Standard Voltages
Code A = 12v DC
Code B = 24v DC
Code T = 110v AC (50/60 Hz)
Code N = 220v AC (50/60 Hz)
Code U = 240v AC (50/60Hz)

Position 10 - Seal material
For Viton® replace 'N' with 'V'
Other materials available
Details on request

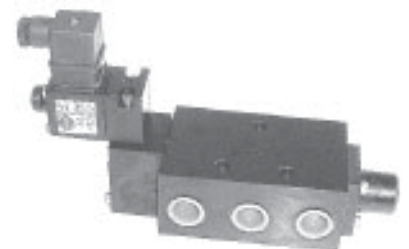
Manual override options (position 13)
Code S = Screwdriver (standard)
Code C = Manual lever
Code D = Push button
Code 1 = Tamperproof

Other voltages
- details on request

Note: All hazardous area coils are ATEX approved
details on request

Position 11 - Body material
Other materials include
Brass (4)

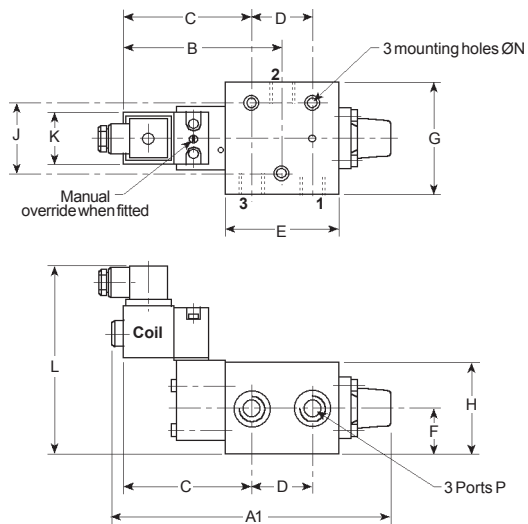
For details see page HDB4.2.2



DAVIS

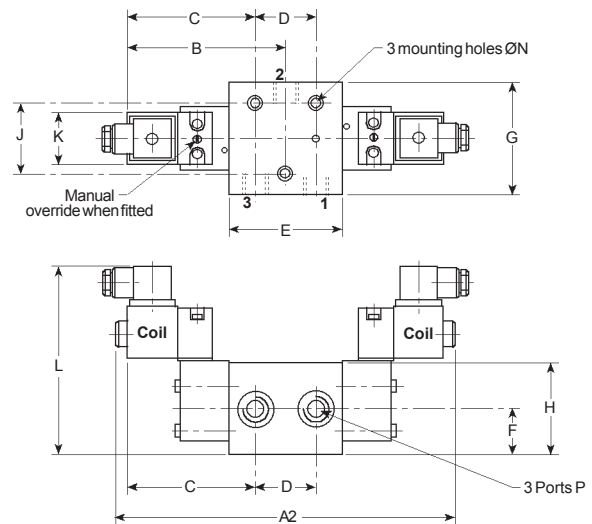
Installation dimensions in mm

3/2 single solenoid, spring return



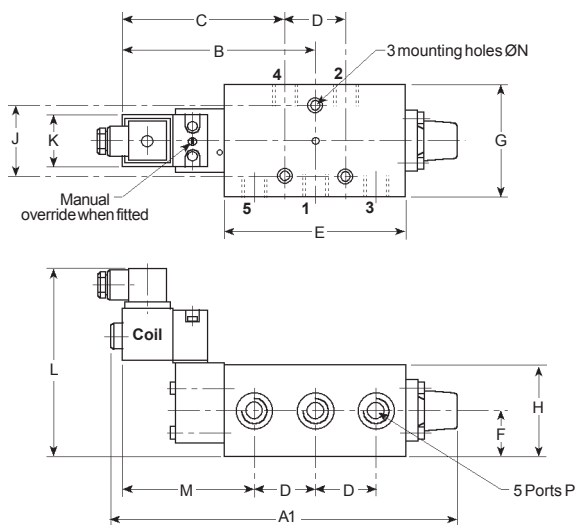
Model	D	E	F	G	H	J	N	P
B4B3PG011N5+ --	41	78	32	76	64	48	6.6	G1/2
B4B3PG012N5+ --	41	78	32	76	64	48	6.6	G1/2

3/2 double solenoid



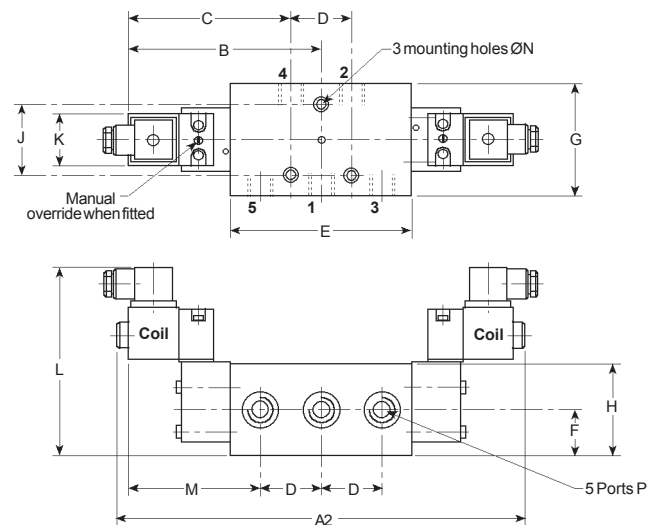
Coil type	A1	A2	B	C	K	L
Plug & Socket	197	243	112	92	35	130
ExN	197	243	112	92	35	122
EExd	227	273	127	107	52	137
EExia	213	259	120	100	35	122
EExme	185	231	106	86	35	126

5/2 single solenoid, spring return



Model	D	E	F	G	H	J	N	P
B4B5PG011N5+ --	41	119	32	76	64	48	6.6	G1/2
B4B5PG012N5+ --	41	119	32	76	64	48	6.6	G1/2

5/2 double solenoid



Coil type	A1	A2	B	C	K	L	M
Plug & Socket	238	284	133	112	35	130	92
ExN	238	284	133	112	35	122	92
EExd	268	314	148	127	52	137	107
EExia	254	300	141	120	35	122	100
EExme	226	272	127	106	35	126	86

Coil options

Coil Code	ATEX Approved	Coil Type	Area Class	Area Category	Ingress Protection	Cable Entry	Ambient Temperature	Coil Class
P	No	Plug & Socket	Safe	N/A	IP65	PG.9	-10°C to 60°C	F
L	No	Plug & Socket with LED	Safe	N/A	IP65	PG.9	-10°C to 60°C	F
N	Yes	ExN	Zone 2	ExN IIT4/T6	IP65	M20 x 1.5	-10°C to 40°C	F
D	Yes	EExd	Zones 1 & 2	EExd IICT4/T6	IP66	M20 x 1.5	-10°C to 40°C	F
9	Yes	EExme	Zones 1 & 2	EExd IICT5	IP65	Flying leads	-10°C to 65°C	F
A	Yes	EExia	Zones 0, 1 & 2	EExia IICT6	IP65	M20 x 1.5	-10°C to 65°C	F

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