

# Poppet Valves

Heavy duty poppet valves  
G<sup>3</sup>/<sub>8</sub>" G<sup>1</sup>/<sub>2</sub>" - 2/2, 3/2

Catalogue 2136GB-ca



# Heavy duty poppet valves

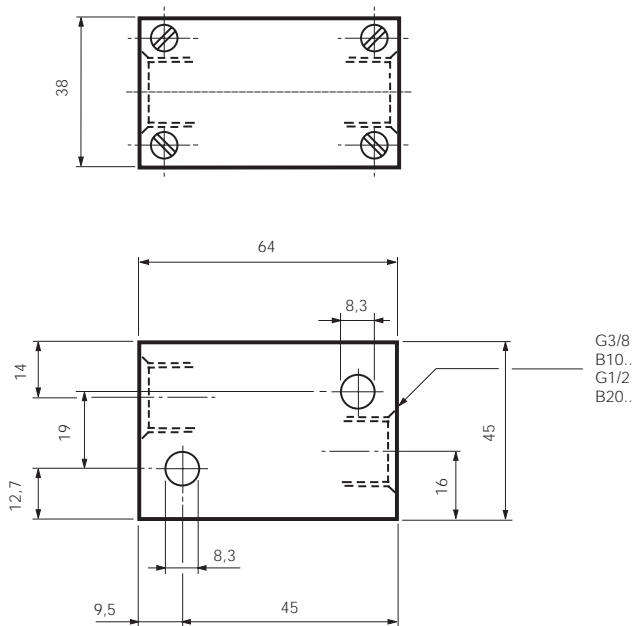
## Heavy duty poppet valves 2/2 & 3/2 - G<sup>3/8</sup>" & G<sup>1/2</sup>"

Utilising the well proven poppet principle to give high flow rates with short valve travel, both the 2/2 and 3/2 valves in the range are available in G<sup>3/8</sup>" and G<sup>1/2</sup>" port sizes. This means that each actuator is available in four configurations i.e. <sup>3/8</sup>" ports 2/2 or 3/2 and G<sup>1/2</sup>" ports 2/2 or 3/2. All valves are normally closed.

The bodies are of block form construction for ease of mounting. Springs are stainless steel; internal seals being of nitrile rubber. The 2/2 body allows air in one direction only, 3/2 versions having the facility of exhausting air through the actuator unit. This exhaust vent is unthreaded on all valves except the pilot and solenoid types which allows the piping away of exhaust air.

All mechanisms are spring returned.

## Basic body dimensions



## Specification

### Material

body	Zinc die cast
Roller	Zinc plated steel
Mechanical arm	Zinc plated steel
Poppet	Brass
Seals	Nitrile
Spring	Stainless steel

## Operating information

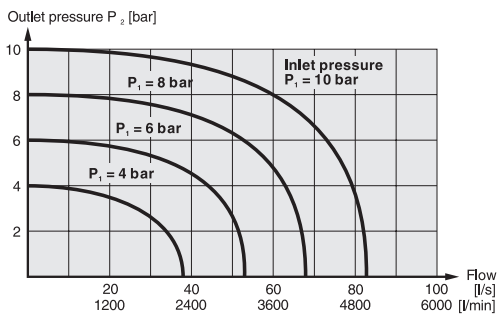
Working pressure	0-10 bar	
Working temperature	-10 °C to +80 °C	
Flow capacities in accordance with ISO6358		
Flow;	<b>B102-B103</b>	<b>B202-B203</b>
	C=7,54	C=10,75 NI/s x bar
	b=0,29	b=0,24
	Qn=33 l/s	Qn=43 l/s
	Qmax=54 l/s	Qmax=75 l/s
	Cv=2,65	Cv=3,20

## Options and additional information

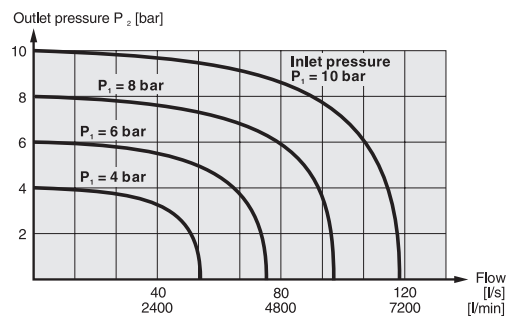
### Flow characteristics

Flow capacities in accordance with ISO6358  
 Flow measured with valve on manifold  
 All pressures = effective pressure

#### B102



#### B202



## Electrical Information

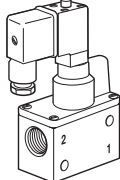




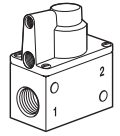




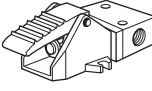




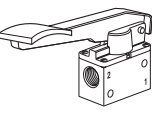




Power consumption	Inrush	Hold	
	AC	9 VA	6 VA
	DC	4 Watt	
Rating	100% continuous		
Isolation class	F		
Protection class	IP 65 (P 54) DIN 40 050		
Connection	DIN 43 650 Form B		
Solenoid response	25 millisecs at 7 bar		
		~	DC
Suffix	50 Hz	=	
S	110	75	
SA	240	160	
TA	24	12	
TF	-	24	
TL	220	150	
	60 Hz		
SC	110	72	
TK	220	145	

### External pilot supply option

Solenoid pilot operated valves have an external pilot air supply, but provision for external pilot is provided. To use with external supply remove the plug situated between the body and the housing and place in the internal supply counterbore to shut off that channel, then remove the nylon plug from the external pilot supply port, connecting an air supply as desired. Orientation of the solenoid coil may be altered by removing the four holding screws and repositioning as required.

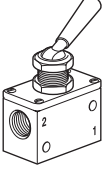
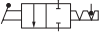
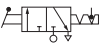
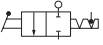
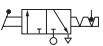
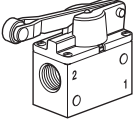
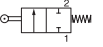
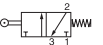
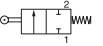
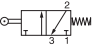
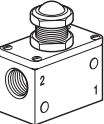
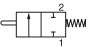
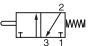
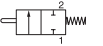
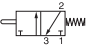
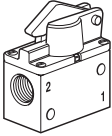
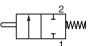
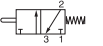
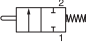
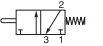
# Heavy duty poppet valves

## Main data for mechanically operated valves, Heavy duty poppet Series (NC only)

	Symbol	Type	Connection	Actuator	Return	Operating force at 6 bar, N	Weight Kg	Order code
		2/2	G3/8	Solenoid pilot	Spring			<b>DB122</b>
		3/2	G3/8	Solenoid pilot	Spring			<b>DB123</b>
		2/2	G1/2	Solenoid pilot	Spring			<b>DB222</b>
		3/2	G1/2	Solenoid pilot	Spring			<b>DB223</b>
		2/2	G3/8	Air pilot	Spring			<b>B102P</b>
		3/2	G3/8	Air pilot	Spring			<b>B103P</b>
		2/2	G1/2	Air pilot	Spring			<b>B202P</b>
		3/2	G1/2	Air pilot	Spring			<b>B203P</b>
		2/2	G3/8	Foot pedal	Spring			<b>B102F</b>
		3/2	G3/8	Foot pedal	Spring			<b>B103F</b>
		2/2	G1/2	Foot pedal	Spring			<b>B202F</b>
		3/2	G1/2	Foot pedal	Spring			<b>B203F</b>
		2/2	G3/8	Hand lever	Spring			<b>B102E</b>
		3/2	G3/8	Hand lever	Spring			<b>B103E</b>
		2/2	G1/2	Hand lever	Spring			<b>B202E</b>
		3/2	G1/2	Hand lever	Spring			<b>B203E</b>

# Heavy duty poppet valves

## Main data for mechanically operated valves, Heavy duty poppet Series (NC only)

	Symbol	Type	Connection	Actuator	Return	Operating force at 6 bar, N	Weight Kg	Order code
		2/2	G3/8	Lever				<b>B102L</b>
		3/2	G3/8	Lock down Lever				<b>B103L</b>
		2/2	G1/2	Lock down Lever				<b>B202L</b>
		3/2	G1/2	Lock down Lever				<b>B203L</b>
		2/2	G3/8	Roller-Lever	Spring	36	0,642	<b>B102R</b>
		3/2	G3/8	Roller-Lever	Spring	36	0,630	<b>B103R</b>
		2/2	G1/2	Roller-Lever	Spring	36	0,614	<b>B202R</b>
		3/2	G1/2	Roller-Lever	Spring	36	0,604	<b>B203R</b>
		2/2	G3/8	Ball	Spring	220	0,542	<b>B102C</b>
		3/2	G3/8	Ball	Spring	220	0,532	<b>B103C</b>
		2/2	G1/2	Ball	Spring	220	0,530	<b>B202C</b>
		3/2	G1/2	Ball	Spring	220	0,520	<b>B203C</b>
		2/2	G3/8	Cam	Spring	220	0,586	<b>B102M</b>
		3/2	G3/8	Cam	Spring	220	0,576	<b>B103M</b>
		2/2	G1/2	Cam	Spring	220	0,530	<b>B202M</b>
		3/2	G1/2	Cam	Spring	220	0,520	<b>B203M</b>

# Heavy duty poppet valves

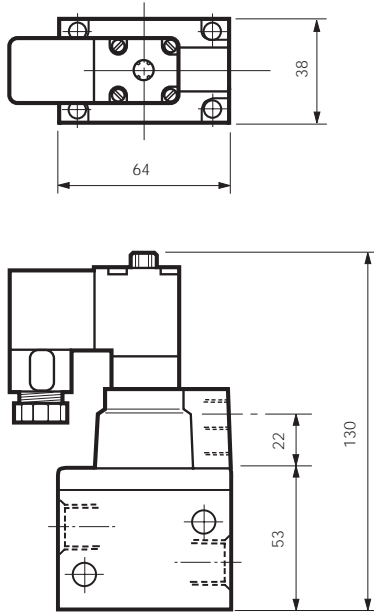
## Dimensions, Limit switches Heavy duty poppet

All dimensions in mm unless otherwise stated

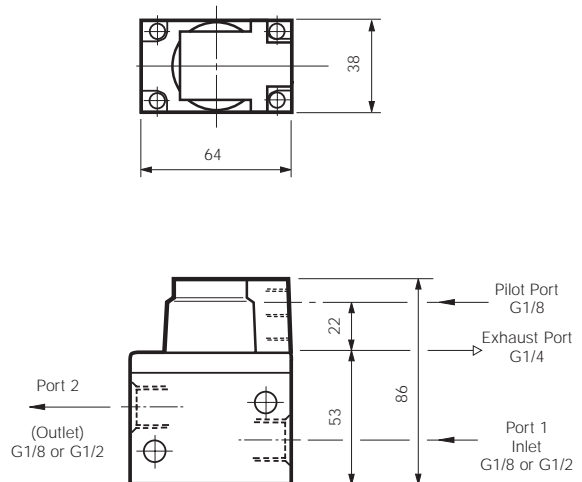
### Mechanically operated valves

#### 2/2, 3/2 valves

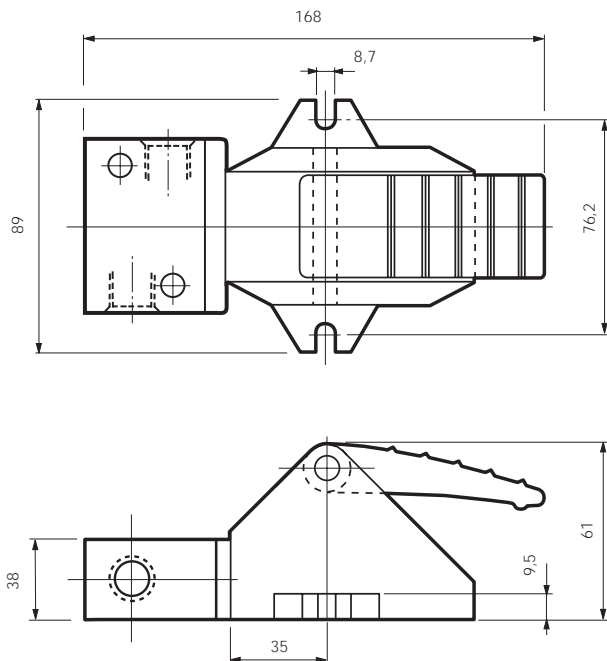
Solenoid pilot operated spring return  
DB122, DB123, DB222, DB223



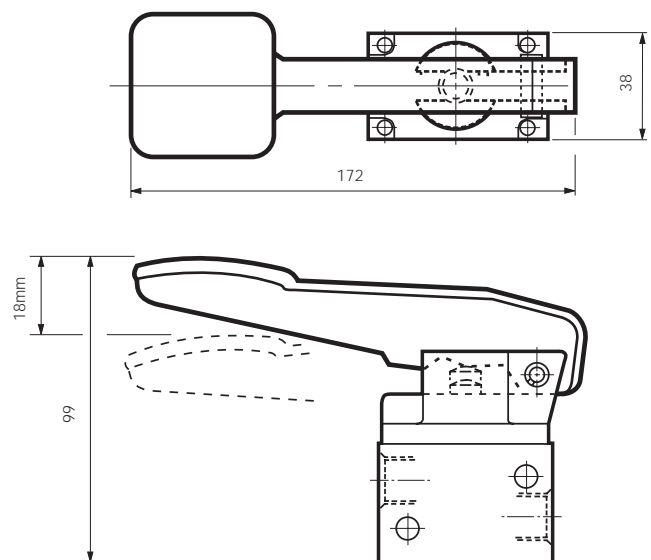
Air pilot operated spring return  
B102P, B103P, B202P, B203P



Foot pedal operated spring return  
B102F, B103F, B202F, B203F



Hand lever operated spring return  
B102E, B103E, B202E, B203E



# Heavy duty poppet valves

## Dimensions, Limit switches Heavy duty poppet

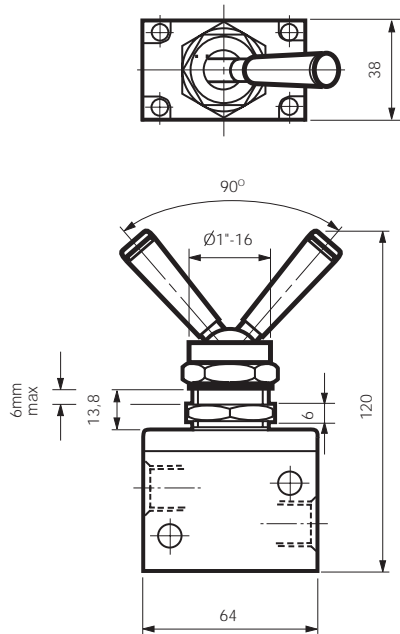
All dimensions in mm unless otherwise stated

### Mechanically operated valves

#### 2/2, 3/2 valves

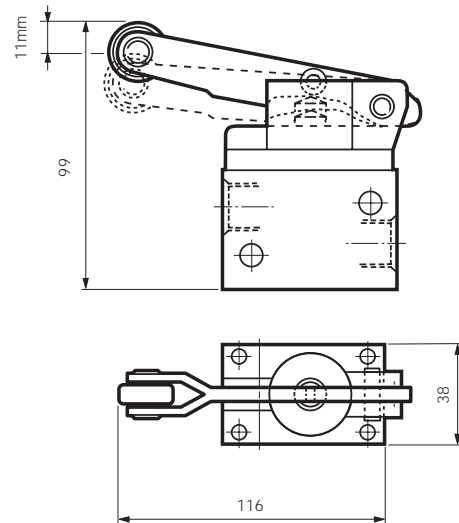
Lock down lever

B102L, B103L, B202L, B203L



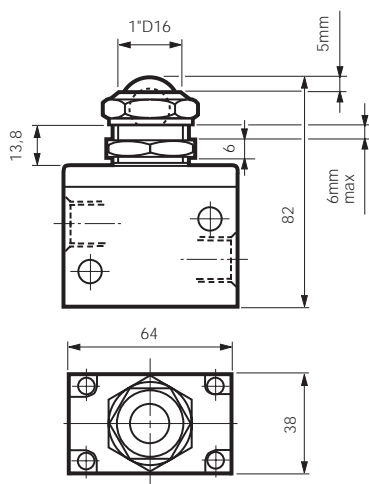
Roller lever operated spring return

B102R, B103R, B202R, B203R



Ball operated spring return

B102C, B103C, B202C, B203C



Cam operated spring return

B102M, B103M, B202M, B203M

