Series 55 Tecno-FUN

General

This line of different logic functions that can be used in any place of the secondary pneumatic circuit, developed to be installed directly onto the main pneumatic components (distributors or cylinders).
Thanks to the modular design it is possible to easily join together multiple logic functions without the need of using pipes to connect them; it is also possible to choose the type and style of each connection. The connections available are the following: straight cartridge; Banjo PL cartridge; male cartridge threaded 1/8" or 1/4" and female cartridge threaded 1/8".
Function fittings can also be assembled side by side in order to be assembled on the DIN EN 50022 rail (using the relevant kit).

Other characteristics:

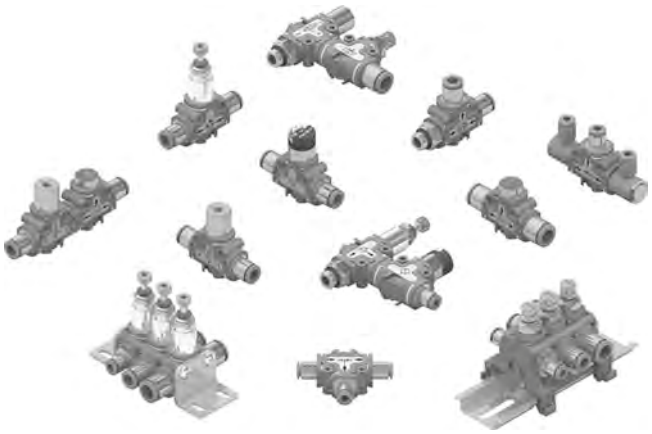
Technopolymer body
Input/output connection directly integrated into the body
In line or 90° connection
Possibility to build a manifold -parallel mounting-
Different connection options:
Tube Ø4 Ø6 Ø8 (elbow version as well)
G1/8" G1/4" male straight cartridge
G1/8" female cartridge, in line or 90°

Different mounting options:

- Wall fixing through the holes in the body
- By means of the fixing bracket
- Panel mounting (for those function that include such possibility)
- On DIN rail EN 50022 (using the DIN rail adapter kit)

Available functions

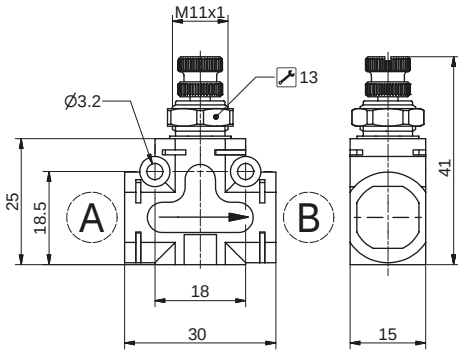
- Flow control valve
- Pressure regulator
- Block valve
- Quick exhaust valve
- OR gate
- AND gate
- Pressure gauge
- Progressive start-up valve
- Pressure regulator + pressure gauge
- Block valve + Flow control valve
- Block valve + quick exhaust valve



Flow regulator

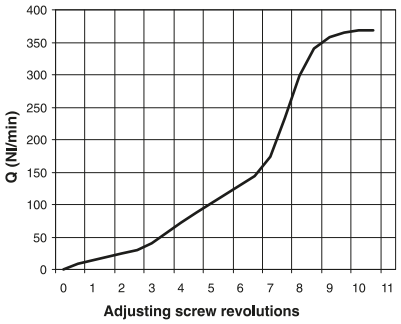
Coding: 551.11Ⓣ.Ⓐ.Ⓑ.XX

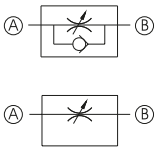
Ⓣ	TYPE
	1 = Unidirectional
	2 = Bidirectional
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female



Example: 551.111.D6.D6.XX
Flow control valve unidirectional, CONNECTIONS "A" and "B" Tube Ø6
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Piloting curves





Construction characteristics

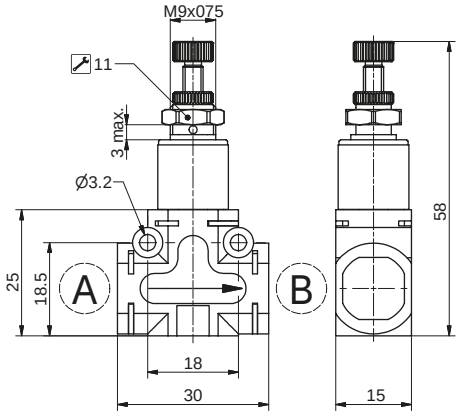
- The flow control valve is normally used to regulate the air flow and, as a consequence, for example, the speed of a cylinder. Two types of flow control valves are available: unidirectional and bidirectional. In the unidirectional valve the flow is regulated only in one direction while is free to move in the opposite direction; in the bidirectional valve the flow is regulated in both directions.
- Panel mounting using the lock nut supplied as standard
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	10
Orifice size (mm)	Ø3
Free exhaust flow rate in the opposite side of the regulation	800 (for unidirectional version)
Temperature °C	-5 ÷ +50
Weight (g)	26

In line pressure regulator

Coding: 551.12Ⓣ.Ⓐ.Ⓑ.XX

Ⓣ	TYPE
	2 = 0-2 bar
	4 = 0-4 bar
	8 = 0-8 bar
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

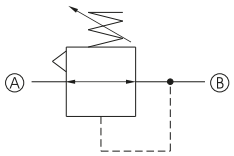


Example: 551.128.D8.D8.XX
In line pressure regulator, pressure range (bar) 0-8 bar. Connections "A" and "B" Tube Ø6
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

- The pressure regulator is a device which is used to reduce, regulate and stabilize the air pressure in a conduit in order to adapt it to the needs of the equipments to be supplied. The pressure regulator incorporates the relieving function.
- Panel mounting using the lock nut supplied as standard
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

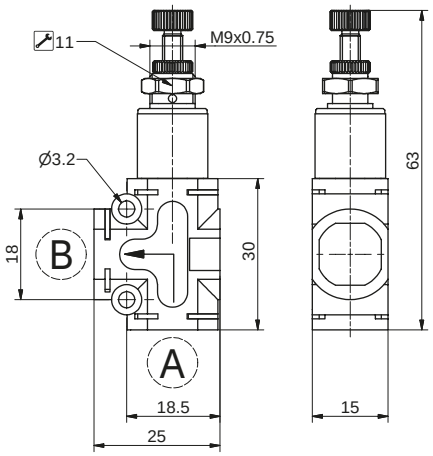
Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	10
Flow rate at 6 bar with Δp=1 (Nl/min)	180
Pressure range (bar)	0÷2 / 0÷4 / 0÷8
Temperature °C	-5 ÷ +50
Weight (g)	31



90° pressure regulator

Coding: 551.22Ⓣ.Ⓐ.Ⓑ.XX

Ⓣ	TYPE
	2 = 0-4 bar
	4 = 0-2 bar
	8 = 0-8 bar
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

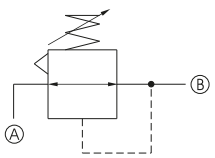


Example: 551.224.M1.D6.XX
90° pressure regulator, pressure range (bar) 0 - 4 bar. Connections "A" Male G1/8 and "B" Tube Ø6
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

- The pressure regulator is a device which is used to reduce, regulate and stabilize the air pressure in a conduit in order to adapt it to the needs of the equipments to be supplied. The pressure regulator incorporates the relieving function.
- Panel mounting using the lock nut supplied as standard
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

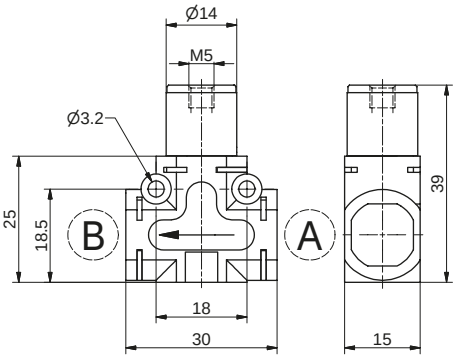
Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	10
Flow rate at 6 bar with Δp=1 (Nl/min)	180
Pressure range (bar)	0÷2 / 0÷4 / 0÷8
Temperature °C	-5 ÷ +50
Weight (g)	31



Blocking valve

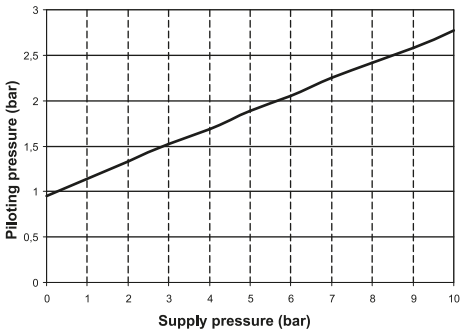
Coding: 551.13❶.Ⓐ.Ⓑ.XX

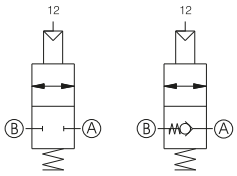
❶	TYPE
	1 = Unidirectional
	2 = Bidirectional
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female



Example: 551.131.D4.D4.XX
In line blocking valve, unidirectional. Connections "A" and "B" Tube Ø4
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Piloting curves





Construction characteristics

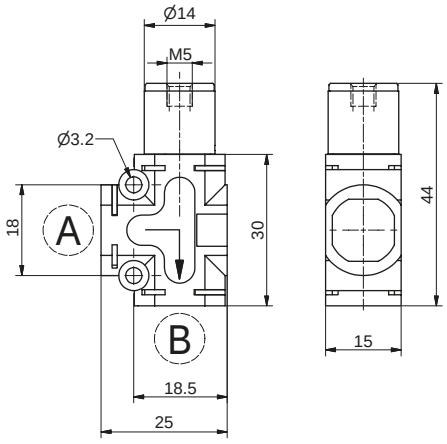
- The blocking valve function is to maintain the circuit downstream pressure in the event of loss of supply pressure. It is normally fitted directly onto the cylinder connections ports in order to ensure that, in case of accidental loss of the supply pressure, the units positions is maintained. This is achieved as the blocking valve preserves the pressure inside the pressurised chamber. Blocking valves can be unidirectional or bidirectional.
- In the unidirectional version the air flow is free in one direction while in order to allow the flow in the opposite direction is necessary to send a pneumatic signal to the unit connection 12.
- The bidirectional version requires a pneumatic signal on connection 12 to allow the flow in any of the two directions.
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	0,5 ÷ 10
Flow rate at 6 bar with Δp=1 (Nl/min)	285
Flow rate at 6 bar with free exhaust (Nl/min)	450
Temperature °C	-5 ÷ +50
Weight (g)	26

90° blocking valve

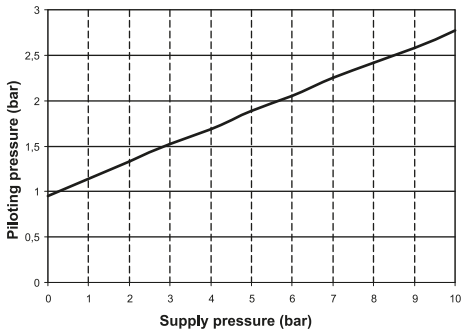
Coding: 551.23Ⓣ.Ⓐ.Ⓑ.XX

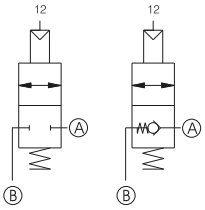
Ⓣ	TYPE
	1 = Unidirectional
	2 = Bidirectional
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female



Example: 551.231.D6.M1.XX
90° blocking valve. Connections "A" Male G1/8 and "B" Tube Ø6
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Piloting curves





Construction characteristics

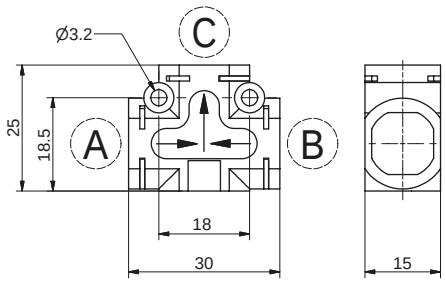
- The blocking valve function is to maintain the circuit downstream pressure in the event of loss of supply pressure. It is normally fitted directly onto the cylinder connections ports in order to ensure that, in case of accidental loss of the supply pressure, the units positions is maintained. This is achieved as the blocking valve preserves the pressure inside the pressurised chamber.
- Unidirectional and bidirectional version are both available.
- In the unidirectional version the air flow is free in one direction while in order to allow the flow in the opposite direction is necessary to send a pneumatic signal to the unit connection 12.
- The bidirectional version requires a pneumatic signal on connection 12 to allow the flow in any of the two directions.
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	0,5 ÷ 10
Flow rate at 6 bar with Δp=1 (Nl/min)	285
Flow rate at 6 bar with free exhaust (Nl/min)	450
Temperature °C	-5 ÷ +50
Weight (g)	26

Circuit selector valve - OR

Coding: 551.141.Ⓐ.Ⓑ.Ⓒ

Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
Ⓒ	CONNECTION C
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

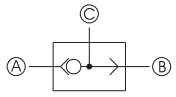


Example: 551.141.D8.D8.D8
Circuit selector valve - OR. Connections "A", "B" and "C" Tube Ø8
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

- These valves have two inlets and one output connection and are normally called high pressure selector valves as, when receiving two separate pressure supply, only allow the passage of the highest pressure. The most common application is to operate a component from two separate positions.
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

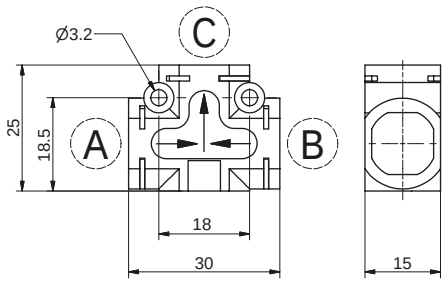
Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	10
Flow rate at 6 bar with Δp=1 (Nl/min)	600
Temperature °C	-5 ÷ +50
Weight (g)	10



Circuit selector valve - AND

Coding: 551.151.Ⓐ.Ⓑ.Ⓒ

Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
Ⓒ	CONNECTION C
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

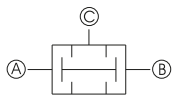


Example: 551.151.D6.D6.D6
Circuit selector valve AND. Connections "A", "B" and "C" Tube Ø6
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

- These valves have two inlets and one output connection and are normally called low pressure selector valves as, when receiving two separate pressure supply, only allow the passage of the lowest pressure. The most common application is to operate a component from two separate positions.
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

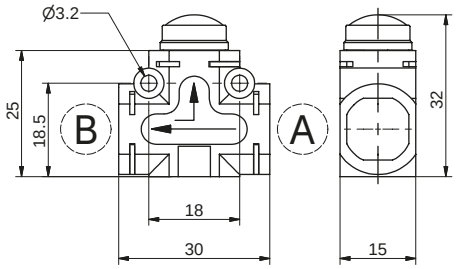
Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	10
Flow rate at 6 bar with Δp=1 (Nl/min)	550
Temperature °C	-5 ÷ +50
Weight (g)	10



Quick exhaust valve

Coding: 551.161.Ⓐ.Ⓑ.XX

Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

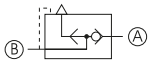


Example: 551.161.D8.D8.XX
Quick exhaust valve. Connections "A" and "B" Tube Ø6
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

- These are 3 ways, two positions valves which can be directly mounted onto the actuator or between the actuator and the control valve. Their function is to discharge the air directly into the atmosphere without going through the pneumatic circuit enabling the actuator to reach the maximum speed.
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

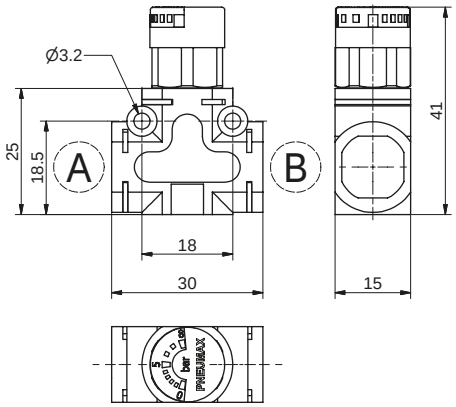
Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	10
Flow rate at 6 bar with Δp=1 (Nl/min)	250
Flow rate at 6 bar with free exhaust (Nl/min)	500
Temperature °C	-5 ÷ +50
Weight (g)	15



Pressure indicator

Coding: 551.178.Ⓐ.Ⓑ.XX

Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

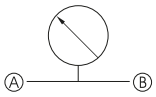


Example: 551.178.D6.D4.XX
Pressure indicator. Connections "A" Tube Ø6, "B" Tube Ø4
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

- The pressure visual indicator is a device which measures the pressure inside a pneumatic circuit. The 0 to 8 bar visual indicator makes very easy to monitor the pressure state inside the circuit. It can be use on its own or can be coupled with another device.
- It can be use on its own or can be coupled with another device.
- on DIN rail using the relevant adaptor kit (see accessories)
- With 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

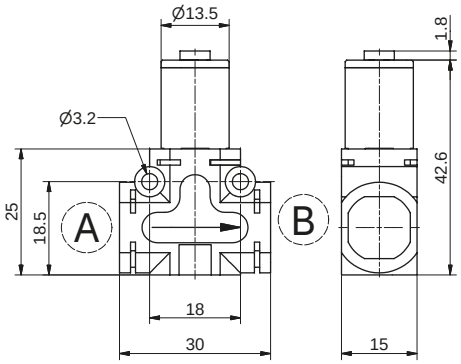
Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	8
Visualization scale (bar)	0 ÷ 8
Temperature °C	-5 ÷ +50
Weight (g)	20.5



In line progressive start-up valve

Coding: 551.181.Ⓐ.Ⓑ.XX

Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

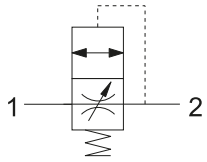


Example: 551.181.D6.D4.XX
In line progressive start-up valve. Connections "A" Tube Ø6, "B" Tube Ø4
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

- The soft start valve is a device designed to gradually pressurise the downstream circuit until 50% of the upstream pressure value is reached.
- Once the 50% of the upstream pressure value is reached in the down stream circuit the valve fully opens allowing full air passage.
- The filling time can be adjusted thanks to the built in flow regulator.
- This device is used in order to ensure that during the pneumatic circuit start up the cylinders will return to theirs home position slowly avoiding collisions or sudden movements.

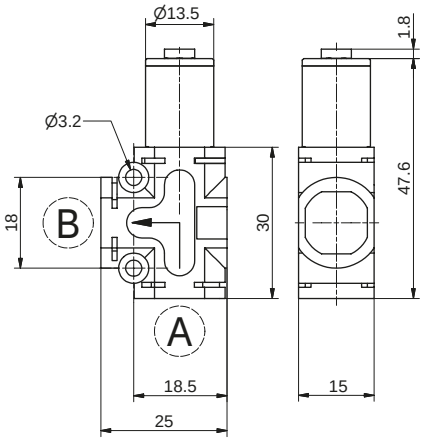
Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Opening pressure (Pa)	50% of the inlet pressure (Pi)
Flow rate at 6 bar with free exhaust (Nl/min) from 1 to 2 with opening ciruit	350
Flow rate at 6 bar with Δp=1 from 1 to 2 with opening ciruit	600
Flow rate at 6 bar with Δp=1 from 2 to 1 with opening pin	650
Temperature °C	-5 ÷ +50
Weight (g)	31



90° progressive start-up valve

Coding: 551.281.Ⓐ.Ⓑ.XX

Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
Ⓛ	**L1** = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

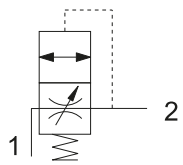


Example: 551.281.M1.D4.XX
90° progressive start-up valve. connections "A" Male G1/8", "B" Tube Ø4
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

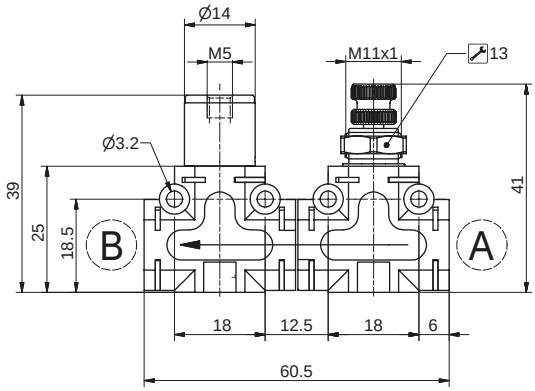
- The soft start valve is a device designed to gradually pressurise the downstream circuit until 50% of the upstream pressure value is reached.
- Once the 50% of the upstream pressure value is reached in the down stream circuit the valve fully opens allowing full air passage.
- The filling time can be adjusted thanks to the built in flow regulator.
- This device is used in order to ensure that during the pneumatic circuit start up the cylinders will return to theirs home position slowly avoiding collisions or sudden movements.

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Opening pressure (Pa)	50% of the inlet pressure (Pi)
Flow rate at 6 bar with free exhaust (Nl/min) from 1 to 2 with opening ciruit	350
Flow rate at 6 bar with Δp=1 from 1 to 2 with opening ciruit	600
Flow rate at 6 bar with Δp=1 from 2 to 1 with opening pin	650
Temperature °C	-5 ÷ +50
Weight (g)	31



In line blocking valve with flow control valve

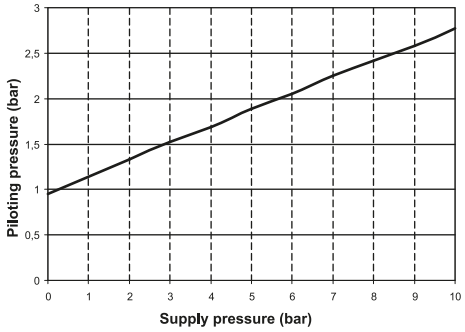
Coding: 551.1F❶.Ⓐ.Ⓑ.XX

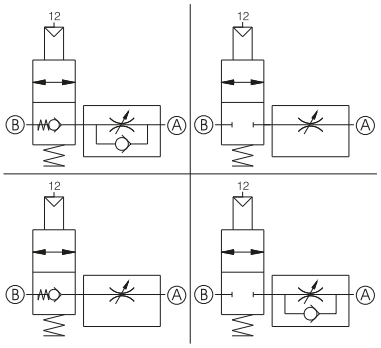


❶	TYPE
	1 = Unidirectional blocking valve + Unidirectional flow control valve
	2 = Bidirectional blocking valve + Bidirectional flow control valve
	3 = Unidirectional blocking valve + Bidirectional flow control valve
	4 = Bidirectional blocking valve + Unidirectional flow control valve
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

Example: 551.1F1.00.00.XX
In line blocking valve + flow control valve. Without connections "A" and "B"
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Piloting curves





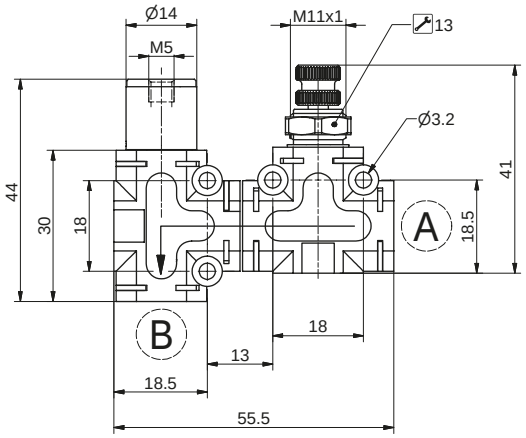
Construction characteristics

- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time grants the possibility to regulate the circuit flow rate. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to regulate the exhaust flow rate when the blocking valve is actuated.
- The possible combinations are the following:
- Unidirectional blocking valve + unidirectional flow control valve
- Bidirectional blocking valve + bidirectional flow control valve
- Bidirectional blocking valve + unidirectional flow control valve
- Unidirectional blocking valve + bidirectional flow control valve

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	0,5 ÷ 10
Flow rate at 6 bar with Δp=1 (Nl/min)	285
Orifice size (mm)	Ø3
Temperature °C	-5 ÷ +50
Weight (g)	62

90° blocking valve + flow control valve

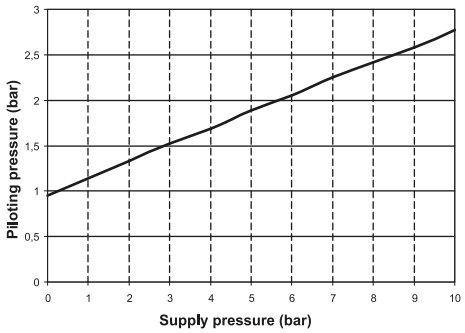
Coding: 551.2F❶.Ⓐ.Ⓑ.XX

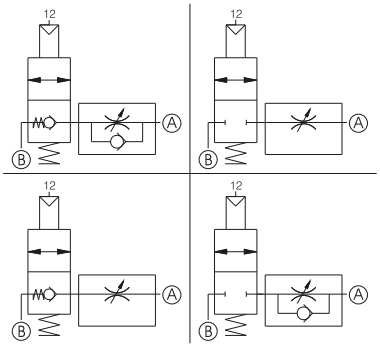


❶	TYPE
	1 = 90° Unidirectional blocking valve + Unidirectional flow control valve
	2 = 90° Bidirectional blocking valve + Bidirectional flow control valve
	3 = 90° Unidirectional blocking valve + Bidirectional flow control valve
	4 = 90° Bidirectional blocking valve + Unidirectional flow control valve
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

Example: 5512F1.00.00.XX
90° blocking valve + flow control valve. Without connections "A" and "B"
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Piloting curves





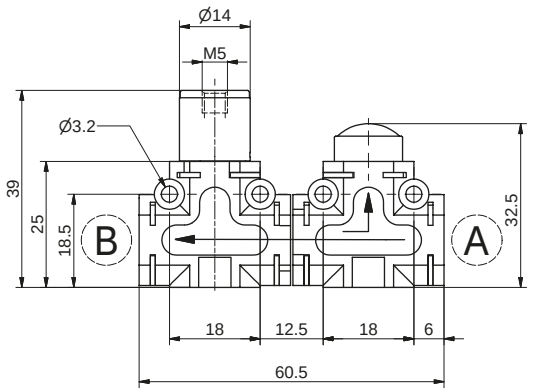
Construction characteristics

- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time grants the possibility to regulate the circuit flow rate. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to regulate the exhaust flow rate when the blocking valve is actuated.
- The possible combinations are the following:
- 90° Unidirectional blocking valve + Unidirectional flow control valve
- 90° Bidirectional blocking valve + Bidirectional flow control valve
- 90° Bidirectional blocking valve + Unidirectional flow control valve
- 90° Unidirectional blocking valve + Bidirectional flow control valve

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	0,5 ÷ 10
Flow rate at 6 bar with Δp=1 (Nl/min)	285
Orifice size (mm)	Ø3
Temperature °C	-5 ÷ +50
Weight (g)	62

In line blocking valve + quick exhaust valve

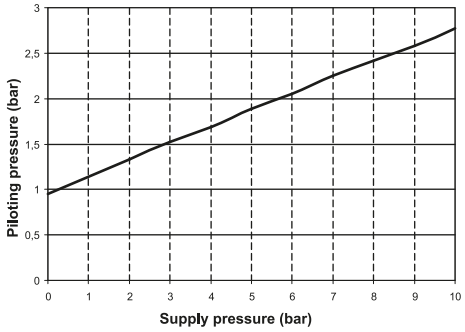
Coding: 551.1GⓉ.Ⓐ.Ⓑ.XX

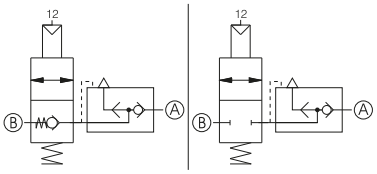


Ⓣ	TYPE
	1 = Unidirectional blocking valve + quick exhaust valve
	2 = Bidirectional blocking valve + quick exhaust valve
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

Example: 5511G1.00.00.XX
In line blocking valve + quick exhaust valve. Without connections "A" and "B"
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Piloting curves





Construction characteristics

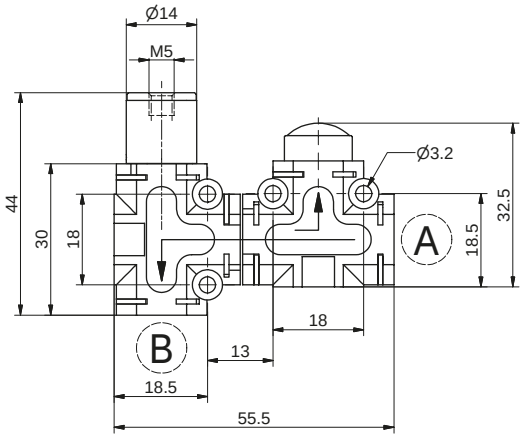
- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time allows for the air to be directly discharged into the atmosphere without going through the pneumatic circuit. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to quickly discharge the same chamber when the blocking valve is actuated.
- The possible combinations are the following:
- Unidirectional blocking valve + quick exhaust valve
- Bidirectional blocking valve + quick exhaust valve

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	0.5 ÷ 10
Flow rate at 6 bar with Δp=1 (Nl/min)	285
Temperature °C	-5 ÷ +50
Weight (g)	51

90° blocking valve + quick exhaust valve

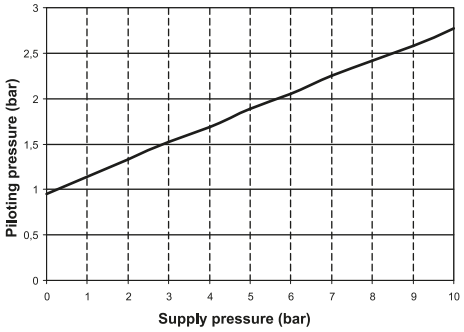
Coding: 551.2GⓉ.Ⓐ.Ⓑ.XX

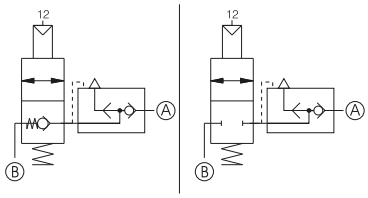
Ⓣ	TYPE
	1 = 90° Unidirectional blocking valve + quick exhaust valve
	2 = 90° Bidirectional blocking valve + quick exhaust valve
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female



Example: 551.2G1.00.00.XX
90° bidirectional blocking valve + quick exhaust valve. Without connections "A" and "B"
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Piloting curves





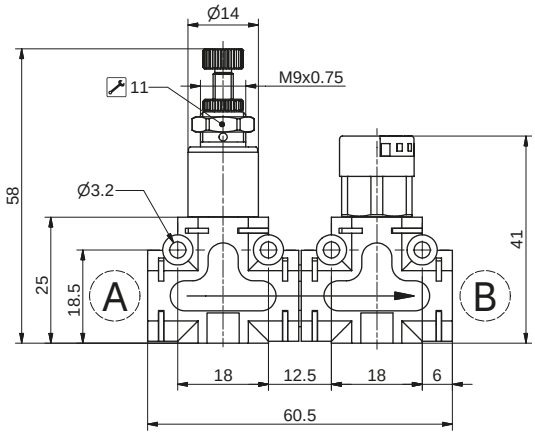
Construction characteristics

- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time allows for the air to be directly discharged into the atmosphere without going through the pneumatic circuit. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to quickly discharge the same chamber when the blocking valve is actuated.
- The possible combinations are the following:
- 90° Unidirectional blocking valve + quick exhaust valve
- 90° Bidirectional blocking valve + quick exhaust valve

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	0,5 ÷ 10
Flow rate at 6 bar with Δp=1 (Nl/min)	285
Temperature °C	-5 ÷ +50
Weight (g)	51

In line pressure regulator + pressure indicator

Coding: 551.1H❶.Ⓐ.Ⓑ.XX



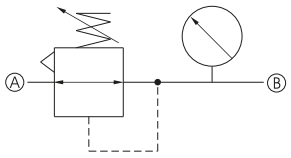
❶	TYPE
	2 = 0-2 bar
	4 = 0-4 bar
	8 = 0-8 bar
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

Example: 551.1H2.M1.D4.XX
In line pressure regulator, adjusting range 0 - 2 bar + pressure indicator. Connections "A" Male G 1/8 and "B" Tube Ø4
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

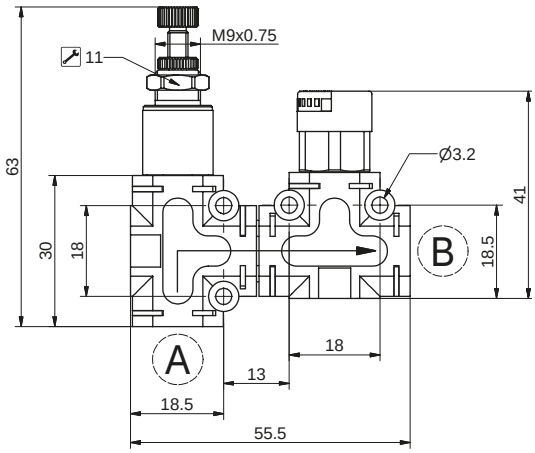
- The combination of this two functions ensures the possibility to regulate the downstream pressure while directly visualising the adjusted pressure value.
- The possible combinations are the following:
- 0 to 2 bar pressure regulator + pressure visual indicator
- 0 to 4 bar pressure regulator + pressure visual indicator
- 0 to 8 bar pressure regulator + pressure visual indicator
- The visual indicator Pressure range (bar) is always 0 to 8 bar

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	8
Visualization scale (bar)	0 ÷ 8
Pressure range (bar)	0 ÷ 2 0 ÷ 4 0 ÷ 8
Temperature °C	-5 ÷ +50
Weight (g)	62



90° pressure regulator + pressure indicator

Coding: 551.2H❶.Ⓐ.Ⓑ.XX



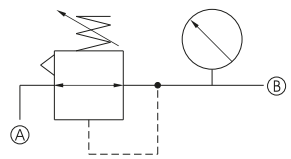
❶	TYPE
	2 = 0-2 bar
	4 = 0-4 bar
	8 = 0-8 bar
Ⓐ	CONNECTION A
	SEE CONNECTIONS LIST
Ⓑ	CONNECTION B
	SEE CONNECTIONS LIST
	CONNECTIONS LIST
	00 = None
	D4 = Straight Ø4
	D6 = Straight Ø6
	D8 = Straight Ø8
	L1 = Female banjo G1/8"
	G4 = Rotating banjo Ø 4
	G6 = Rotating banjo Ø 6
	G8 = Rotating banjo Ø 8
	M1 = G1/8" male
	M2 = G1/4" male
	F1 = G1/8" female

Example: 551.2H2.M1.D4.XX
90° pressure regulator, adjusting range 0 - 2 bar + pressure indicator. Connections "A" Male G 1/8 and "B" Tube Ø4
NOTE : For the dimension including cartridges see page Accessories - Function fittings

Construction characteristics

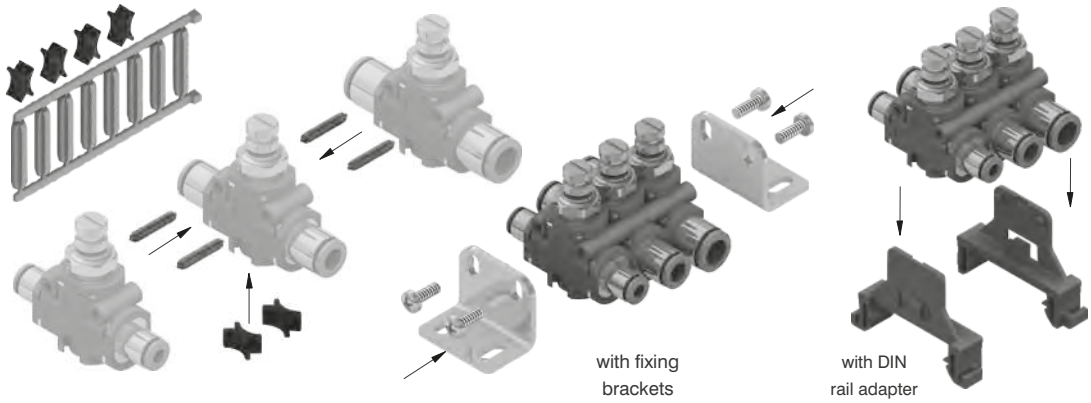
- The combination of this two functions ensures the possibility to regulate the downstream pressure while directly visualising the adjusted pressure value.
- The possible combinations are the following:
- 0 to 2 bar pressure regulator + pressure visual indicator
- 0 to 4 bar pressure regulator + pressure visual indicator
- 0 to 8 bar pressure regulator + pressure visual indicator
- The visual indicator Pressure range (bar) is always 0 to 8 bar

Technical characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Working ports size	See CONNECTIONS LIST
Max working pressure (bar)	8
Visualization scale (bar)	0 ÷ 8
Pressure range (bar)	0 ÷ 2 0 ÷ 4 0 ÷ 8
Temperature °C	-5 ÷ +50
Weight (g)	62



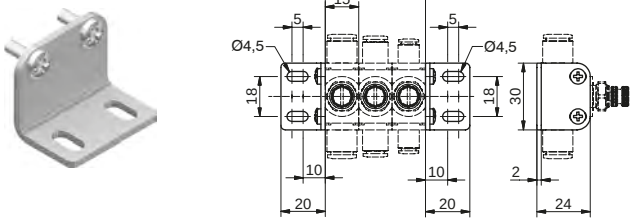
Coupling kit (pins and forks)

Coding: 55160



- Weight 2,5 g
- The kit, which includes a series of pins and forks, enables to join together in a fast and safe way the function fittings. The pins, once inserted in the front holes, ensure resistance against forces applied perpendicularly and sideway (for example the insertion of the tube in the cartridges).
- The forks, once located in the profiled housing ensures that the parts are held together tightly.
- The kit allows for 5 function fittings to be mounted together.

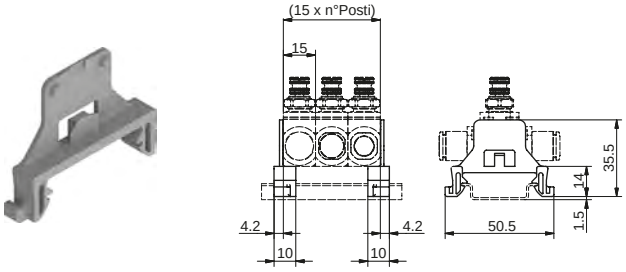
Fixing brackets



Coding: 55150

Weight 18 g
The kit comprises two fixing brackets and the screws

DIN rail adapter



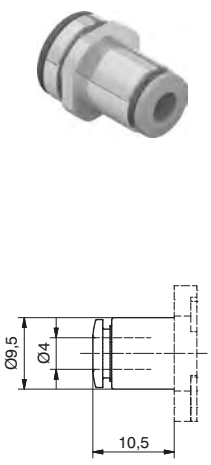
Coding: 55116

Weight 4 g
The kit comprises two adapters

Ø4, Ø6 & Ø8 straight cartridge

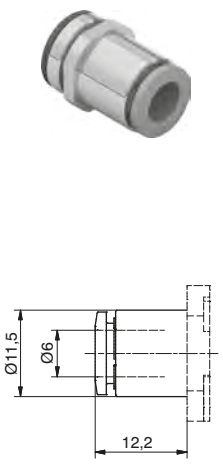
Coding: 551KD©

©	CONNECTIONS
	4 = tube Ø4
	6 = tube Ø6
	8 = tube Ø6



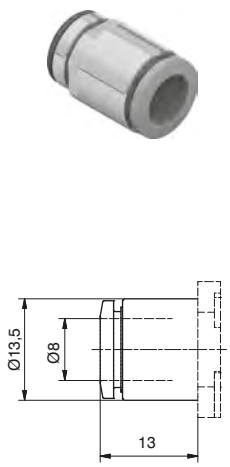
Weight 7,5 g

551KD4



Weight 7,3 g

551KD6



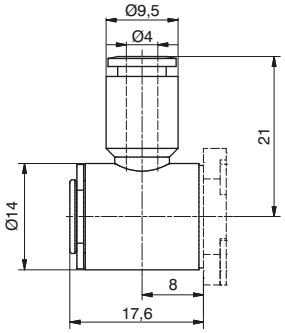
Weight 7 g

551KD8

Ø4, Ø6 & Ø8 banjo PL cartridge

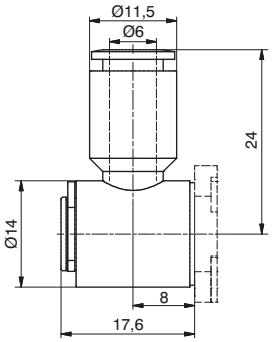
Coding: 551KG©

©	CONNECTIONS
	4 = tube Ø4
	6 = tube Ø6
	8 = tube Ø6



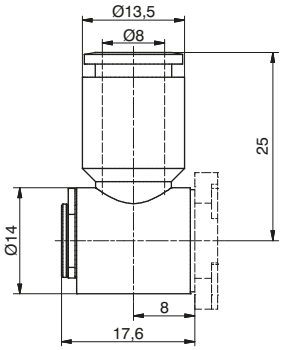
Weight 13,6 g

551KG4



Weight 14 g

551KG6



Weight 14,3 g

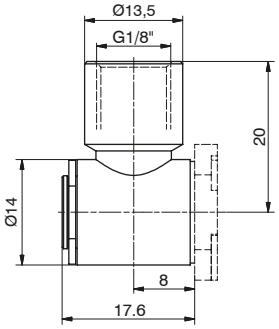
551KG8

G1/8" banjo artridge

Coding: 551KL©

©	CONNECTIONS
	1 = G1/8"

Weight 30 g



551KL1

Connection for multiple function

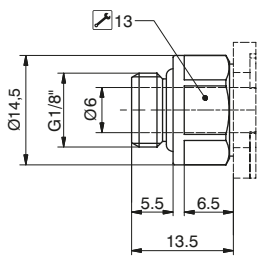
Coding: 551KUU

Weight 14 g

Cartridge

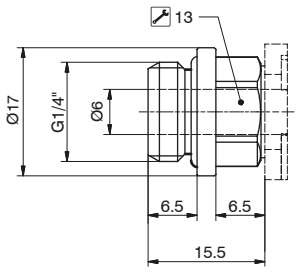
Coding: 551K©

©	CONNECTIONS
	M1 = G1/8" male straight cartridge
	M2 = G1/4" male straight cartridge
	F1 = G1/8" female straight cartridge



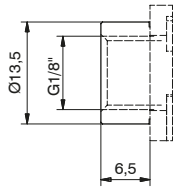
Weight 14 g
G1/8" male straight cartridge

551KM1



Weight 20 g
G1/4" male straight cartridge

551KM2



Weight 9 g
G1/8" female straight cartridge

551KF1

Series 1750-1760

General

This new type of miniaturised pressure regulators are mostly indicated for the use on the secondary level of the pneumatic circuits. Thanks to the contained dimensions are particularly indicated to be used very closely or directly mounted onto the consumption. Three versions are available.

Version rod G1/8" swivel ring with female thread G 1/8" and G 1/4" or push-in fitting for tube Ø4, Ø6 and Ø8

model with body in technopolymer integrated gauge and quick coupling fittings for tube Ø4 and Ø6.

G/1/8" model to be directly mounted onto the valve

Compact design to be directly mounted onto the valves uses standard swivel rings with G1/8" female thread (ref 41218) or quick coupling fittings for tube sizes. It is also possible to supply the regulating shaft without the swivel ring.

Model with body in technopolymer and integrated gauge

is the more complete solution, comprises a movable gauge which enables to check the regulated pressure.

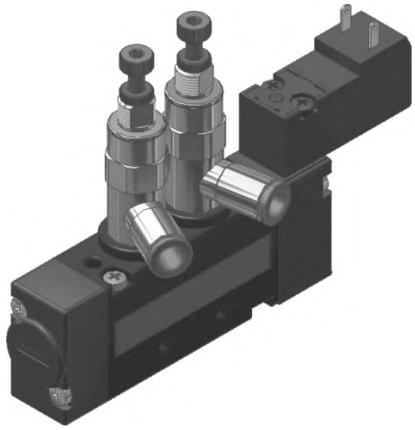
Is manufactured using the same regulating unit as the base model fitted into a technopolymer body on which are inserted two quick coupling cartridges, 4mm or 6mm tube for inlet and outlet connections; two side plates lock the cartridges and gauge in position.

It is possible to join together more than one regulator by means of a dedicated adaptor made of technopolymer which must be inserted in the appropriate slot. (the air must be supplied independently to each regulator.)

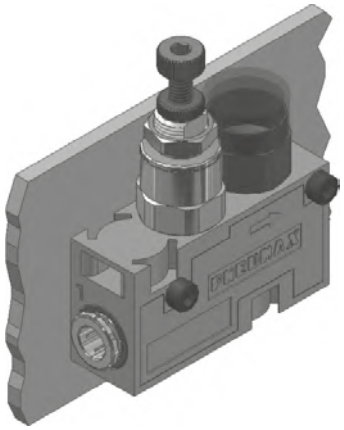
Several mounting solutions are available: wall mounting via two mounting holes, on DIN rail using the specific accessories or on panels.

Mounting solutions

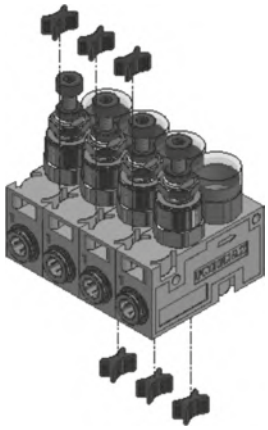
G/1/8" model to be directly mounted onto the valve:
Directly mounted onto the valves threaded connections (consumptions)



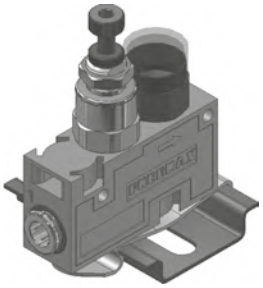
Model with body in technopolymer and integrated gauge:
Panel mounting via the locking nut



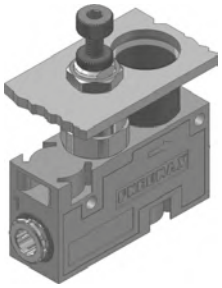
Model with body in technopolymer and integrated gauge:
Wall mounting via the mounting holes on the body



Model with body in technopolymer and integrated gauge:
On DIN rail using the specific accessories



Model with body in technopolymer and integrated gauge:
Panel mounting via the locking nut



Miniaturised pressure regulators - with technopolymer body

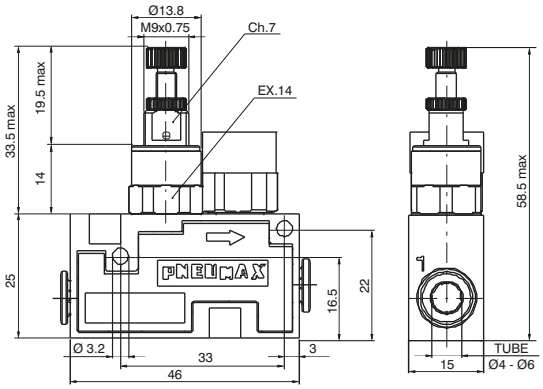
Coding: 17522AⒸ.Ⓖ

Construction characteristics

- Regulating cartridge = Nickel-plated brass
- Regulator body = Technopolymer
- Seals = Oil resistant nitrilic rubber (NBR)
- Plunger spring = AISI 302
- Regulating spring = Spring suitable steel
- Plunger = Oil resistant nitrilic rubber (NBR)
- Other parts = Brass

Operational characteristics	
Max working pressure (bar)	10
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	120
Working ports size	Ø4-Ø6
Inlet connections sizes	Ø4-Ø6
Mounting positioning	Any

Ⓒ	CONNECTIONS
	4 = Tube Ø4
	6 = Tube Ø6
Ⓖ	REGULATION RANGE
	C = 0÷8bar
	B = 0÷4bar
	A = 0÷2bar



Miniaturised pressure regulators, rod G1/8"

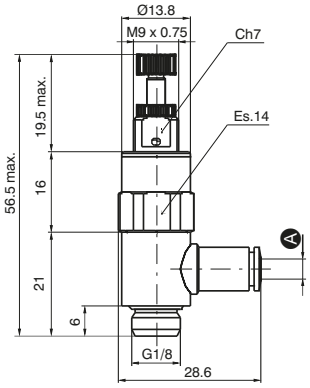
Coding: 17602AⒶ.Ⓖ

Construction characteristics

- Regulating cartridge = Nickel-plated brass
- Regulator body = Nickel-plated brass
- Seals = Oil resistant nitrilic rubber (NBR)
- Plunger spring = AISI 302
- Regulating spring = Spring suitable steel
- Plunger = Oil resistant nitrilic rubber (NBR)
- Other parts = Brass

Operational characteristics	
Max working pressure (bar)	10
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	120
Working ports size	G1/8"
Inlet connections sizes	G1/8"-Ø4-Ø6-Ø8
Mounting positioning	Any

Ⓐ	SWIVEL RING
	0 = None
	1 = Swivel ring G1/8" female
	4 = Tube Ø4
	6 = Tube Ø6
	8 = Tube Ø8
Ⓖ	REGULATION RANGE
	C = 0÷8bar
	B = 0÷4bar
	A = 0÷2bar



Miniaturised pressure regulators, rod G1/4"

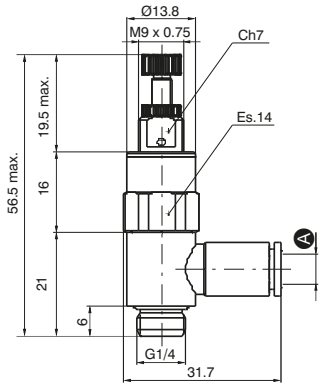
Coding: 17602BⒶ.Ⓖ

Construction characteristics

- Regulating cartridge = Nickel-plated brass
- Regulator body = Nickel-plated brass
- Seals = Oil resistant nitrilic rubber (NBR)
- Plunger spring = AISI 302
- Regulating spring = Spring suitable steel
- Plunger = Oil resistant nitrilic rubber (NBR)
- Other parts = Brass

Operational characteristics	
Max working pressure (bar)	10
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	120
Working ports size	G1/4"
Inlet connections sizes	G1/4"-Ø4-Ø6-Ø8
Mounting positioning	Any

Ⓐ	SWIVEL RING
	0 = None
	1 = Swivel ring G1/4" female
	6 = Tube Ø6
	8 = Tube Ø8
Ⓖ	REGULATION RANGE
	C = 0÷8bar
	B = 0÷4bar
	A = 0÷2bar



Series Mini-RAP

Technical data

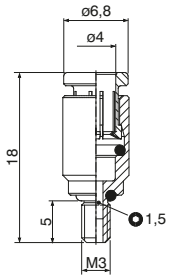
Working temperature: -20°C +70°C
Maximum working pressure: 10 bar
Fluid: Compressed air (others fluids on requests)
Nichel-plated brass body, Brass grip, Silicone free NBR gaskets
Thread: Cylindrical with O-Ring
Maximum fixing torque for fittings
Thread: M3: 0,4 Nm
Thread: M6 and M6x0,75: 1,3 Nm

Main characteristics

1. Can be inserted and extracted with one hand
2. Suitable for tube Rilsan, Polyurethane, Nylon, Polyethylene
3. Supercompact
4. Extremely lightweight yet sturdy
5. O-Ring provided with his own seat to ensure seal with polished surface
6. Suitable for vacuum applicatio

RDR Straight male adaptor (parallel)

Coding: RDR3.40-MH05

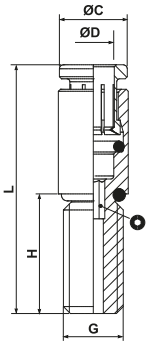


RDR3.40-MH05

RDR Straight male adaptor (parallel)

Coding: RDR6.40-Ⓥ

Ⓥ	VERSION		
	MH12	=	M6, H=12mm
	FH12	=	M6x0,75, H=12mm

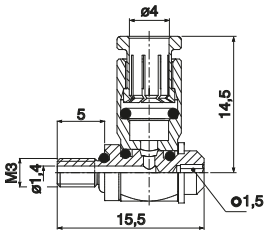


CODE	ØD	G	ØC	H	L	O
RDR6.40-MH12	4	M6	6,8	12	25	2
RDR6.40-FH12	4	M6x0,75	6,8	12	25	2

RDR6.40-Ⓥ

RGR Complete single banjo with stem

Coding: RGR3.40-MH05

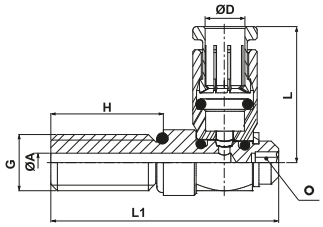


RGR3.40-MH05

RGR Complete single banjo with stem

Coding: RGR6.40-Ⓥ

Ⓥ	VERSION		
	MH12	=	M6, H=12mm
	FH12	=	M6x0,75, H=12mm



CODE	ØD	G	ØA	H	L1	L	O
RGR6.40-MH12	4	M6	2	12	24,3	14,5	2
RGR6.40-FH12	4	M6x0,75	2	12	24,3	14,5	2

RGR6.40-Ⓥ