1

General

These accessories are a range of devices for completing a pneumatic circuit. These valves, with their special functions, are inserted between two valves, between a valve and a cylinder, or following a cylinder.

One of the particular characteristic of these accessories is that they are automatically actuated without the need for external commands. Usually, operation and idle are controlled by the presence or absence of pressure as, for example, in the case of quick exhaust valves which pilots itself as a selector, changing the flow direction as the signal goes off and on.

On the other hand, other components are inert. That is, they do not have any internal variable function which is sensitive to pressure. Among these components are silencers, manifolds and flow regulators.

There are also the flow regulators, which like electronic components, can be defined as variable resistences. They are fundamental in regulating the flow rate, provide precise timings and regulate the cylinders' speed.

The selector valves, with "AND" and "OR" functions, are logic functions components which often are an essential element. Furthermore, they are built to allow high flow rate which cannot be obtained by classic pneumatic logic.

The block valves lock the cylinder in a position, avoiding unexpected depressurization of the cylinder's chamber due to lack of compressed air at the inlet port. Practically, it is a piloted unidirectional valve that blocks the exhaust port when there is no air in the pilot circuit.

Finally the economizer valves are in fact a pressure reducer valves installed between valve and cylinder for reducing the air consumption. For example this is applicable on the cylinder return stroke without penalizing the exhaust as happens with FRL pressure regulator.

Construction characteristics

We have not listed all different materials used for the construction of these components because the list would be too the long. We use corrosion proof material, brass or anodized aluminium and the most appropriate specific mixture for seals. If more information is required please contact our technical department

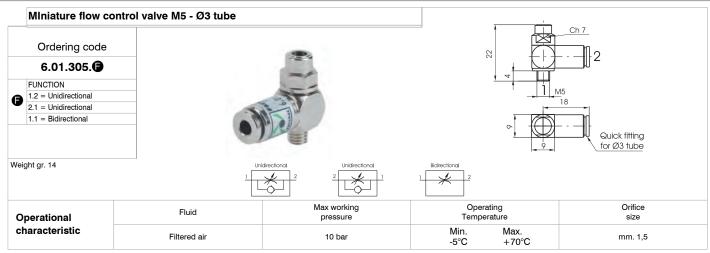
Use and maintenance

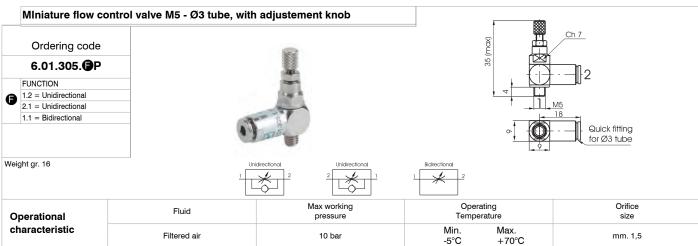
In operation pay attention to the minimum and maximum criteria for temperature and pressure, and ensure good quality compressed air. In a dirty environment, protect the exhaust ports. In this case, maintenance is minimal and is necessary only if the air is particularly dirty. The components most subject to damage by the accumulation of dirt are flow regulators with fine regulation and silencers. As for regulators, follow the normal procedure for disassembling, washing with non-chemical cleaning agents and remounting. The silencers need only to be rinsed in petrol or solvent and blown dry with compressed air.

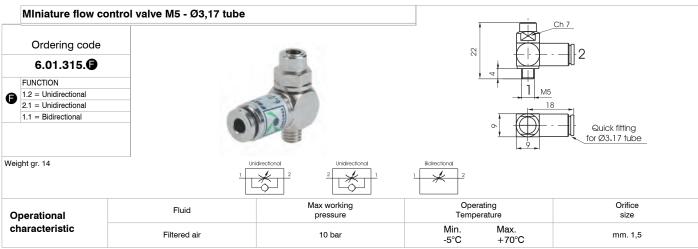
The number of requests for spare seals for flow regulators and shuttle valves are statistically irrelevant. More often, it is necessary to replace the lining of the quick exhaust because of the wear it undergoes due to the particular conditions of operating.

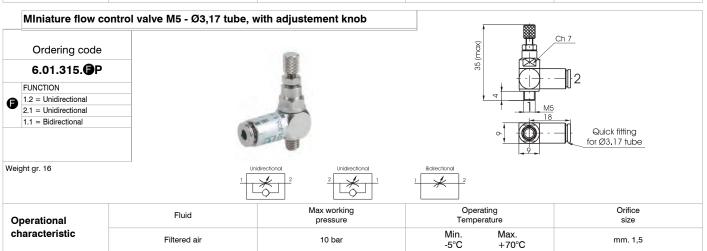
ATTENTION: for lubrication use class H hydraulic oils, for example Castrol MAGNA GC 32.





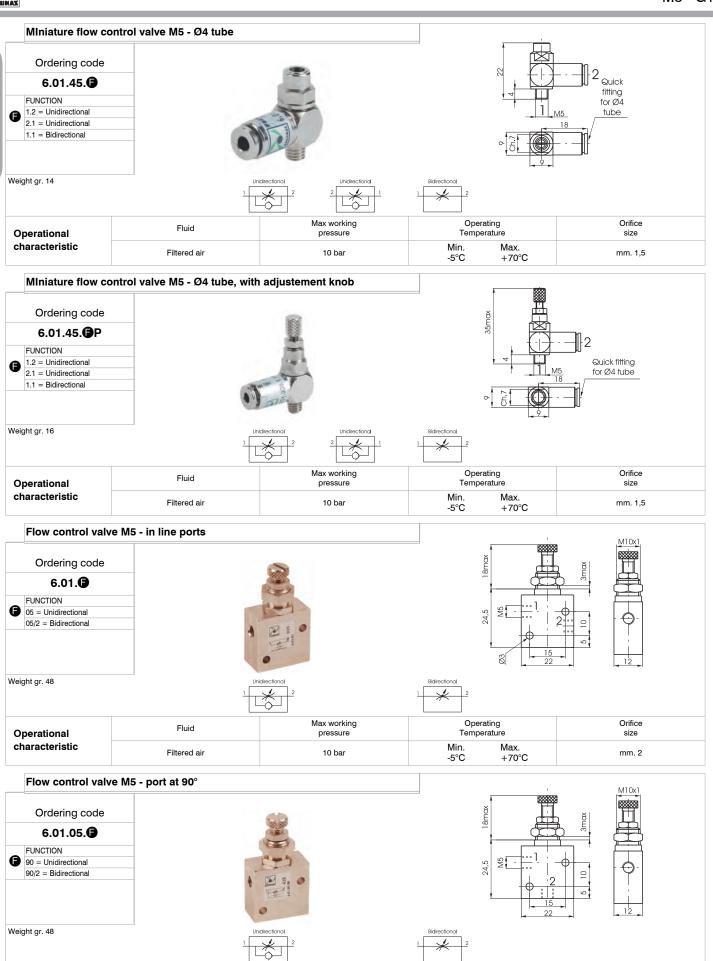












Max working pressure

10 bar

Filtered air

Operational

characteristic

Min.

Operating Temperature

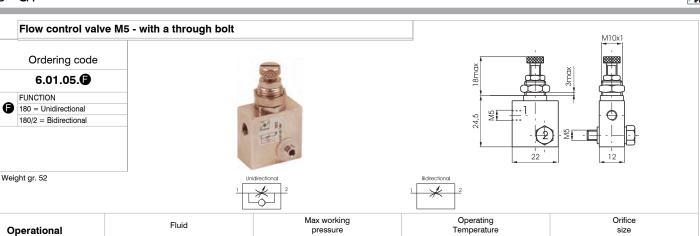
+70°C

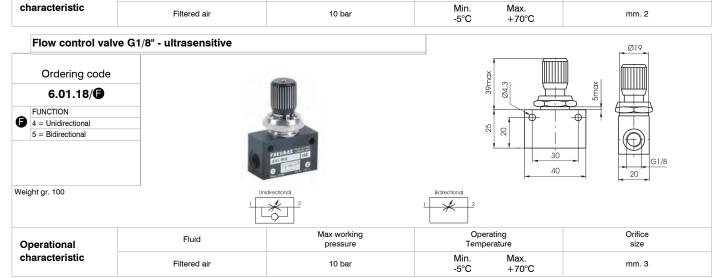
Orifice

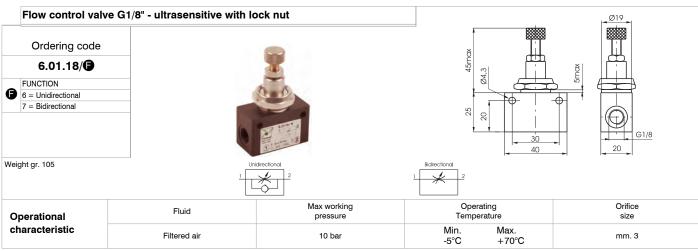
size

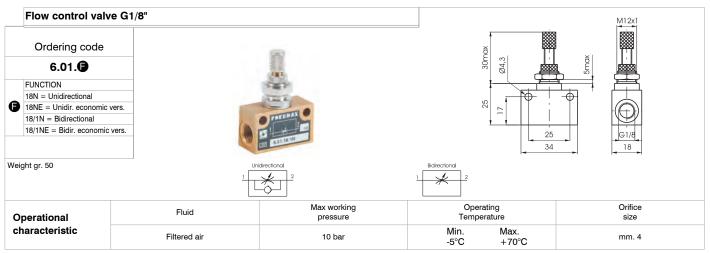
mm. 2

characteristic



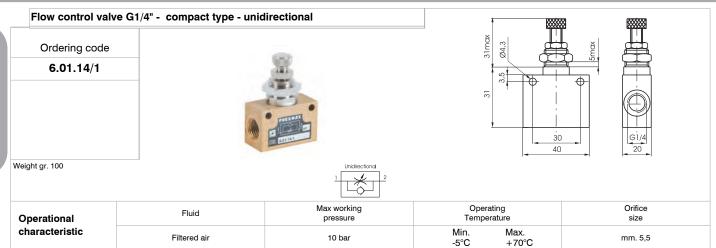


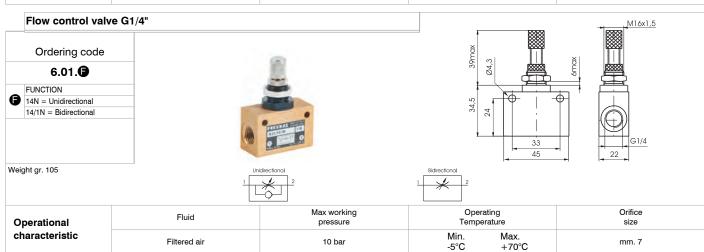


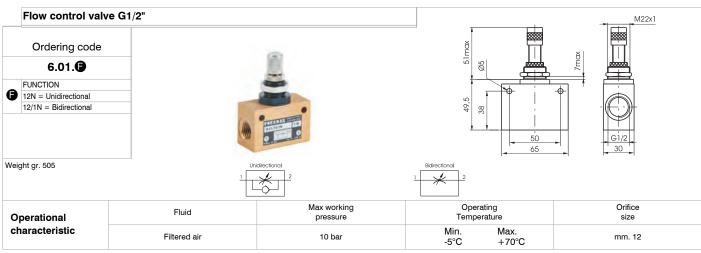


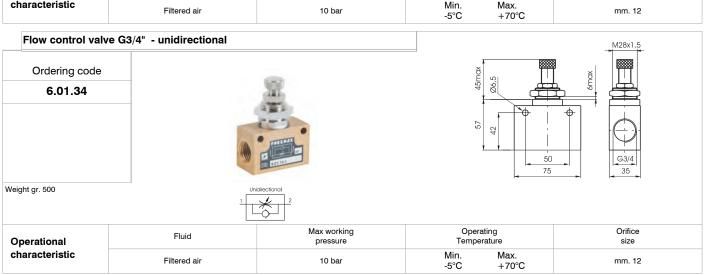










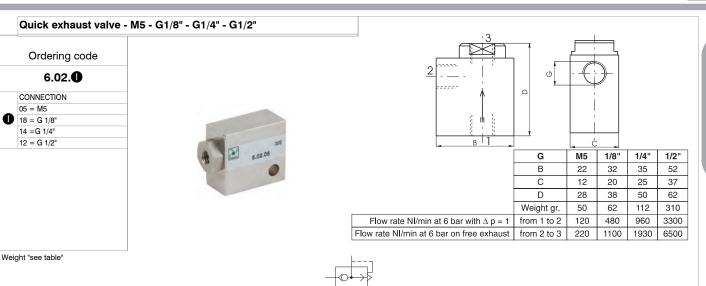




Operational characteristic Operating Temperature

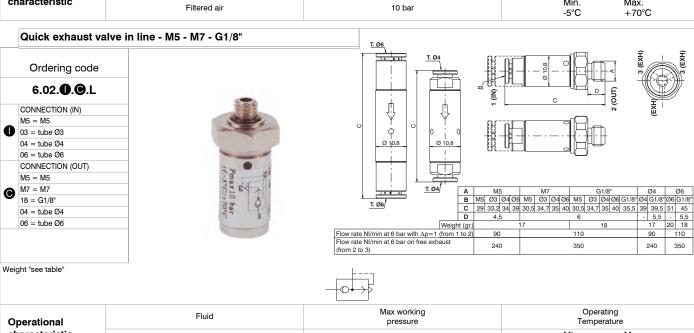
Мах.



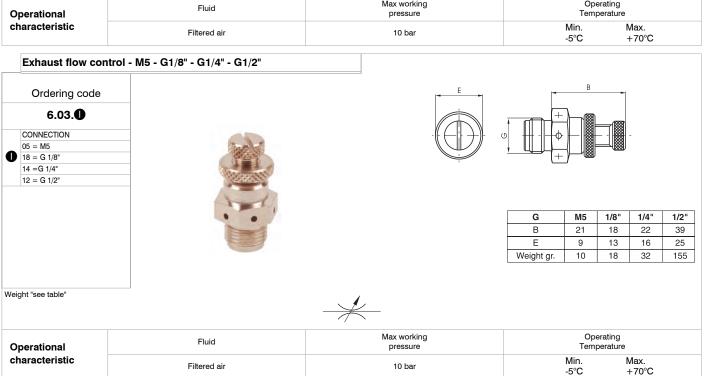


Max working pressure

10 bar



Fluid







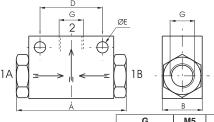




6.04.

	CONNECTION
n	05 = M5
J	18 = G 1/8"
	14 =G 1/4"





	G	M5	1/8"	1/4"
	Α	27	44	62
	В	12	16	22
	D	15	25	35
	E	3,5	4,5	5,5
	Weight gr.	33	50	110
Flow rate at 6 bar with $\Delta p = 1$	NI/min.	110	700	2200

Weight "see table"



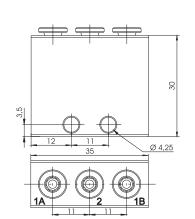
Operational	Fluid	Max working pressure	Operating Temperature
characteristic	Filtered air	10 bar	Min. Max. -5°C +70°C

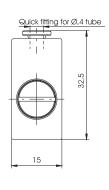
Shuttle valve "OR" - T=4

Ordering code

6.04.04







Weight gr. 50



Operational	Fluid	Max working pressure	Operating Temperature	Flow rate 6 bar at Δp=1	Orifice size	Connections
characteristic	Filtered and lubricated air	10 bar	Min. Max. -5°C +70°C	105 NI/min	mm. 2,5	Fitting T=4

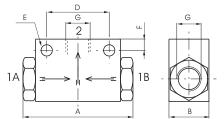
Shuttle valve "AND" - M5 - G1/8"



6.04. 1

CONNECTION
05 = M5
18 = G 1/8"





	G	M5	1/8"
	Α	36	44
	В	12	16
	D	20	25
	E	3,2	4,5
	F	3,5	4,5
	Weight gr.	30	50
Shar with An - 1	NI/min	100	480



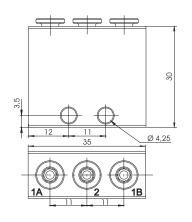
Operational characteristic	Fluid	Max working pressure	Operating Temperature
	Filtered air	10 bar	Min. Max. -5°C +70°C

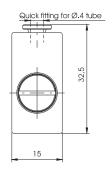
Shuttle valve "AND" - T=4

Ordering code

6.04.04/1







Weight gr. 50



	Operational	Fluid	pressure	Temperature	at Δp=1	size	Connections
characteristic	characteristic	Filtered air	10 bar	Min. Max. -5°C +70°C	105 NI/min	mm. 2,5	Fitting T=4

Silencers steel wool - G1/8" - G1/4" - G3/8" - G1/2"

Ordering code

6.05.

CONNECTION

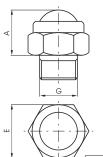
18 = G 1/8"

14 = G 1/4"

38 = G 3/8"

12 = G 1/2"





G	1/8"	1/4"	3/8"	1/2"
Α	12	13	15	17
E	14	17	22	27
Weight gr.	8	16	32	44

Weight "see table"



Operational	Fluid	Max working pressure	Operating Temperature	
characteristic	Filtered air	10 bar	Min. Max. -5°C +70°C	

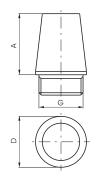
Silencers brass M5 - G1/8" - G1/4" - G3/8" - G1/2" - G3/4" - G1"

Ordering code

6.06.

	CONNECTION
	05 = M5
	18 = G 1/8"
0	14 =G 1/4"
v	38 = G 3/8"
	12 = G 1/2"
	34 = G 3/4"
	01 = G 1"





G	M5	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Α	17	15	18	28	32	40	50
D	8	12	15	19	23	29	38
Weight gr.	4	8	15	35	50	92	182



Operational	Fluid	Max working pressure	Operating Temperature
characteristic	Filtered air	10 bar	Min. Max. -5°C +70°C



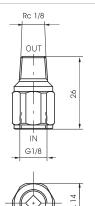
G 1/8" compact check valves

Ordering code

6.07.18.**©**

SEALS
R = NBR
VR = FPM







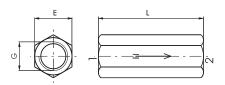


Operational	Fluid	Max working pressure	Operating Temperature	Flow rate 6 bar at Δp=1	
characteristic	Filtered air	Min. 2,5 bar Max.	Min. Max. -5°C +70°C	100 NI/min	

Check valves M5 - G/18" - G1/4" - G3/8" - G1/2"

Ordering code 6.07. POPPET 05 = NBR - M5 18 = NBR - G 1/8" 14 = NBR - G 1/4" 38 = NBR - G 3/8" 12 = NBR - G 1/2" 18V = FPM - G 1/8" 14V = FPM - G 1/4" 38V = FPM - G 3/8" 12V = FPM - G 1/2"





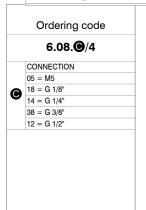
	G	M5	1/8"	1/4"	3/8"	1/2"	
	Е	10	14	17	21	25	
	L	21	37	48	50	60	
	Weight gr.	14	35	60	85	136	
Flow rate at 6 bar with $\Delta p = 1$	NI/min.	160	650	1150	2600	3500	

Weight "see table"

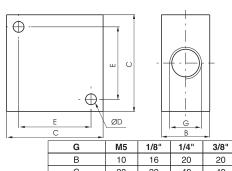


Operational characteristic	Fluid	Max working pressure	Operating Temperature		
	Filtered and lubricated air	10 bar	Min. Max. -5°C +70°C (+150°C		

Manifold 4 ports M5 - G1/8" - G1/4" - G3/8" - G1/2"





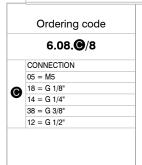


-	-		1-4		-	
	G	M5	1/8"	1/4"	3/8"	1/2"
	В	10	16	20	20	30
	С	20	32	40	40	50
	D	3,3	4,5	4,5	5,5	6,5
	E	14	22	30	30	38
	Weiaht ar.	28	38	68	54	135

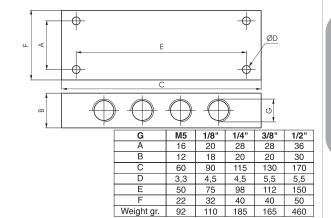
Operational characteristic	Fluid	Max working pressure	Operating Temperature		
	Filtered air	20 bar	Min. Max.		











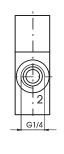
Weight "see table"

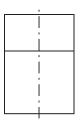
Operational characteristic	Fluid	Max working pressure	Operating Temperature	
	Filtered air	20 bar	Min. Max. -5°C +70°C	

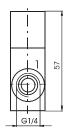
Block valve G1/4"











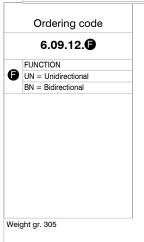
G1/8 12 8

Weight gr. 122

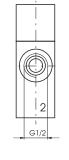


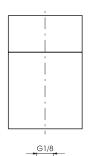
Operational	Fluid	Max working pressure	Min. piloting pressure	Operating Temperature	Flow rate at 6 bar with Δp=1	Orifice size
characteristic	Filtered and lubricated air	10 bar	4 bar	Min. Max. -5°C +70°C	700 NI/min	mm. 7

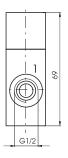
Block valve G1/2"









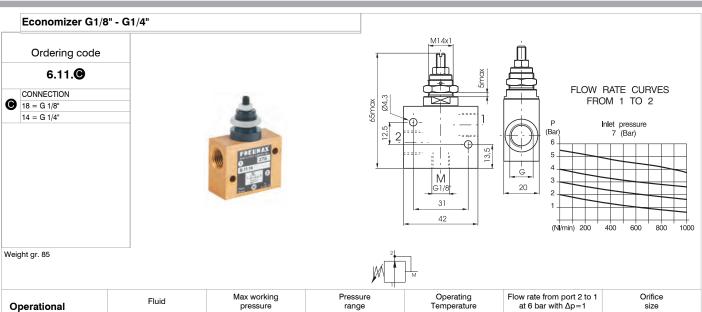


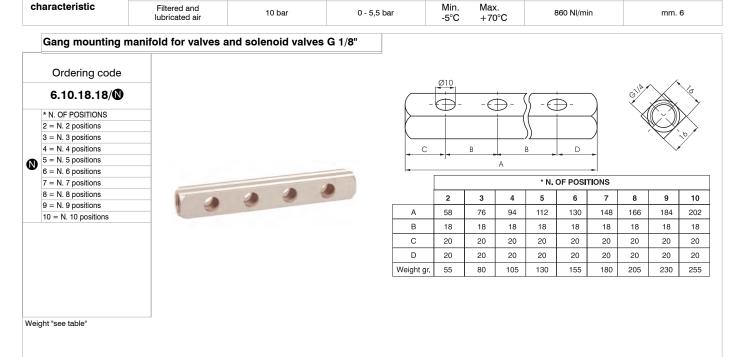
G1/8 12 S 60

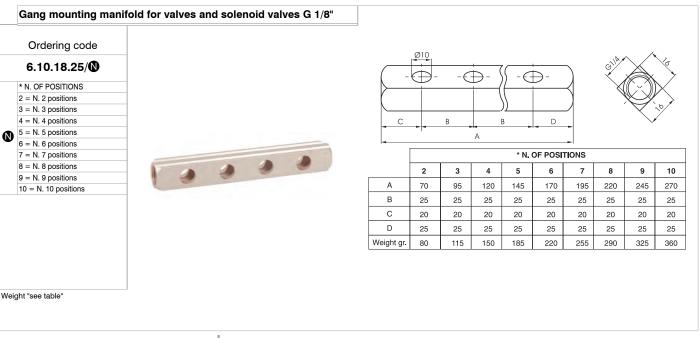
	Unidirec	tional	
12 -		₹	Mı

Operational	Fluid	Max working pressure	Min. piloting pressure	Operating Temperature	Flow rate at 6 bar with Δp=1	Orifice size
characteristic	Filtered and lubricated air	10 bar	4 bar	Min. Max. -5°C +70°C	2000 NI/min	mm. 12













Gang mounting manifold for valves and solenoid valves G 1/8"

Ordering code

6.10.18.26/

* N. OF POSITIONS
2 = N. 2 positions
3 = N. 3 positions

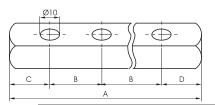
4 = N. 4 positions

6 = N. 6 positions 7 = N. 7 positions

8 = N. 8 positions

9 = N. 9 positions 10 = N. 10 positions







	* N. OF POSITIONS									
	2	3	4	5	6	7	8	9	10	
Α	66	92	118	144	170	196	222	248	274	
В	26	26	26	26	26	26	26	26	26	
O	20	20	20	20	20	20	20	20	20	
D	20	20	20	20	20	20	20	20	20	
Weight gr.	70	110	145	185	220	260	300	340	375	

Weight "see table"

Gang mounting manifold for valves and solenoid valves G 1/8"

Ordering code

6.10.18.30/

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* N	_	FP	200	ITIC	אוכ		

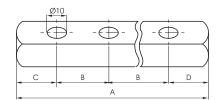
2 = N. 2 positions 3 = N. 3 positions

4 = N. 4 positions

7 = N. 7 positions 8 = N. 8 positions

9 = N. 9 positions 10 = N. 10 positions







		* N. OF POSITIONS							
	2	3	4	5	6	7	8	9	10
Α	80	110	140	170	200	230	260	290	320
В	30	30	30	30	30	30	30	30	30
С	25	25	25	25	25	25	25	25	25
D	25	25	25	25	25	25	25	25	25
Weight gr.	100	140	180	220	260	300	340	380	420

Weight "see table"

Gang mounting manifold for valves and solenoid valves G 1/8"

Ordering code

6.10.18.32/

* N. OF POSITIONS
2 = N. 2 positions
3 = N. 3 positions

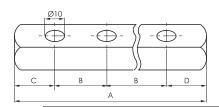
4 = N. 4 positions

6 = N. 6 positions

7 = N. 7 positions 8 = N. 8 positions 9 = N. 9 positions

10 = N. 10 positions







		* N. OF POSITIONS								
	2	3	4	5	6	7	8	9	10	
А	82	114	146	178	210	242	274	306	338	
В	32	32	32	32	32	32	32	32	32	
С	25	25	25	25	25	25	25	25	25	
D	25	25	25	25	25	25	25	25	25	
Weight gr.	100	145	190	235	280	325	370	415	460	





Gang mounting manifold for valves and solenoid valves G 1/8"

Ordering code

6.10.18.35/

* N. OF POSITIO	NS
2 = N. 2 position	s
3 = N 3 position	s

4 = N. 4 positions

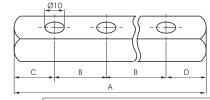
6 = N. 6 positions

7 = N. 7 positions

8 = N. 8 positions

9 = N. 9 positions

10 = N. 10 positions





		* N. OF POSITIONS								
	2	3	4	5	6	7	8	9	10	
Α	89	124	159	194	229	264	299	334	369	
В	35	35	35	35	35	35	35	35	35	
С	27	27	27	27	27	27	27	27	27	
D	27	27	27	27	27	27	27	27	27	
Weight gr.	110	160	210	260	310	360	410	460	510	

Weight "see table'

Gang mounting manifold for valves and solenoid valves G 1/4"

Ordering code

6.10.14.20/

* N. OF POSITIONS

2 = N. 2 positions

3 = N. 3 positions 4 = N. 4 positions

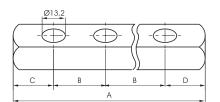
6 = N. 6 positions

7 = N. 7 positions

8 = N. 8 positions 9 = N. 9 positions

10 = N. 10 positions







		* N. OF POSITIONS							
	2	3	4	5	6	7	8	9	10
А	65	85	105	125	145	165	185	205	225
В	20	20	20	20	20	20	20	20	20
С	22,5	22,5	22,5	22,5	22,5	22,5	22,5	22,5	22,5
D	22,5	22,5	22,5	22,5	22,5	22,5	22,5	22,5	22,5
Weight gr.	130	150	190	190	210	230	250	270	290

Weight "see table'

Gang mounting manifold for valves and solenoid valves G 1/4"

Ordering code

6.10.14.25/

* N. OF POSITIONS 2 = N. 2 positions

3 = N. 3 positions

4 = N. 4 positions

5 = N. 5 positions 6 = N. 6 positions

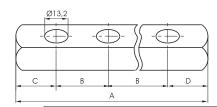
7 = N. 7 positions

8 = N. 8 positions

9 = N. 9 positions

10 = N. 10 positions







		* N. OF POSITIONS							
	2	3	4	5	6	7	8	9	10
Α	75	100	125	150	175	200	225	250	275
В	25	25	25	25	25	25	25	25	25
С	25	25	25	25	25	25	25	25	25
D	25	25	25	25	25	25	25	25	25
Weight gr.	140	170	200	230	260	290	320	350	380



Gang mounting manifold for valves and solenoid valves G 1/4"

Ordering code

6.10.14.30/

*	N.	OF	POSITIONS	

2 = N. 2 positions 3 = N. 3 positions

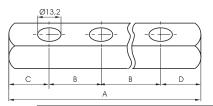
4 = N. 4 positions

7 = N. 7 positions

8 = N. 8 positions

9 = N. 9 positions 10 = N. 10 positions







	* N. OF POSITIONS									
	2	3	4	5	6	7	8	9	10	
Α	80	110	140	170	200	230	260	290	320	
В	30	30	30	30	30	30	30	30	30	
O	25	25	25	25	25	25	25	25	25	
D	25	25	25	25	25	25	25	25	25	
Weight gr.	150	190	230	270	310	350	390	430	470	

Weight "see table"

Gang mounting manifold for valves and solenoid valves G 1/4"

Ordering code

6.10.14.35/

	-			,	_
* N	OF	POS	OITIS	NIC	

2 = N. 2 positions

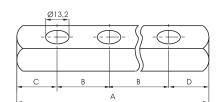
3 = N. 3 positions 4 = N. 4 positions

7 = N. 7 positions

8 = N. 8 positions 9 = N. 9 positions

10 = N. 10 positions







		* N. OF POSITIONS							
	2	3	4	5	6	7	8	9	10
Α	85	120	155	190	225	260	295	335	365
В	35	35	35	35	35	35	35	35	35
С	30	30	30	30	30	30	30	30	30
D	20	20	20	20	20	20	20	20	20
Weight gr.	160	210	260	310	360	410	460	510	560

Weight "see table"

Gang mounting manifold for valves and solenoid valves G 1/4"

Ordering code

6.10.14.45/

* N. OF POSITIONS 2 = N. 2 positions

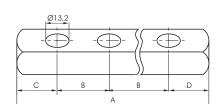
3 = N. 3 positions 4 = N. 4 positions

6 = N. 6 positions

7 = N. 7 positions 8 = N. 8 positions

9 = N. 9 positions 10 = N. 10 positions







		* N. OF POSITIONS								
	2	3	4	5	6	7	8	9	10	
А	115	160	205	250	295	340	385	430	475	
В	45	45	45	45	45	45	45	45	45	
С	35	35	35	35	35	35	35	35	35	
D	35	35	35	35	35	35	35	35	35	
Weight gr.	200	275	350	425	500	575	650	725	800	





