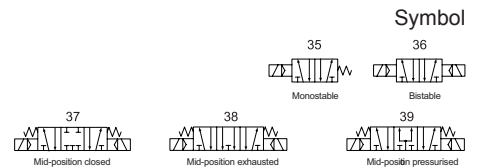




## »4V« Series

517.2000–517.2306, 517.3000–517.3506



### Product features

Traditional and robust pilot valve series. Suitable for all applications where pneumatic actuators have to be operated. These valves are designed for in-line installation or as mass-produced valves for mounting on a multiple manifold base. Mounting in any position.

The following types are available:

- Five port sizes (M5, 1/8", 1/4", 3/8" and 1/2")
- 5/2 and 5/3-way versions

### Valve's specification

Type No.	Size 100						Size 200									
	517.2000 517.2100	517.2200 517.2300	517.3000 517.3100 517.3200 517.3300 517.3400 517.3500	517.2001 517.2101	517.2201 517.2301	517.3001 517.3101 517.3201 517.3301 517.3401 517.3501	517.2002 517.2102	517.2202 517.2302	517.3002 517.3102 517.3202 517.3302 517.3402 517.3502	517.2003 517.2103	517.2203 517.2303	517.3003 517.3103 517.3203 517.3303 517.3403 517.3503				
Fluid	Air (to be filtered by ≤40 µm filter element)															
Acting	Piloted															
Port size	In = Out = M5		In = Out = 1/8"		In = Out = Exhaust = 1/8"		In = Out = 1/4" Exhaust = 1/8"									
Valid area of section	5.5 mm <sup>2</sup> (Cv=0.31)		5.0 mm <sup>2</sup> (Cv=0.28)		12.0 mm <sup>2</sup> (Cv=0.67)		9.0 mm <sup>2</sup> (Cv=0.50)		14.0 mm <sup>2</sup> (Cv=0.78)		12.0 mm <sup>2</sup> (Cv=0.67)		16.0 mm <sup>2</sup> (Cv=0.89)		12.0 mm <sup>2</sup> (Cv=0.67)	
Valve type	5 port 2 position		5 port 3 position		5 port 2 position		5 port 3 position		5 port 2 position		5 port 3 position		5 port 2 position		5 port 3 position	
Operating pressure	1.5 to 8 bar (0.15 to 0.8 MPa; 21 to 114 psi)															
Proof pressure	15 bar (1.5 MPa; 215 psi)															
Temperature	-20 to 70 °C															
Material of body	Aluminum alloy															
Lubrication	Not required															
Manual control	latching/non-latching															
Max. frequency	5 cycle/s		3 cycle/s		5 cycle/s		3 cycle/s		5 cycle/s		3 cycle/s		5 cycle/s		3 cycle/s	
Weight	120 g   175 g		200 g		120 g   175 g		200 g		220 g   320 g		360 g		220 g   320 g		360 g	
Flow rate measurement at P <sub>1</sub> = 8 bar, P <sub>2</sub> = 6 bar and pressure drop Δp = 1 bar	300 L/min		250 L/min		500 L/min		400 L/min		750 L/min		550 L/min		850 L/min		550 L/min	

## »4V« Series

517.2000–517.2306, 517.3000–517.3506

### Valve's specification

Type No.	Size 300						Size 400		
	517.2004 517.2104	517.2204 517.2304	517.3004 517.3104 517.3204 517.3304 517.3404 517.3504	517.2005 517.2105	517.2205 517.2305	517.3005 517.3105 517.3205 517.3305 517.3405 517.3505	517.2006 517.2106	517.2206 517.2306	517.3006 517.3106 517.3206 517.3306 517.3406 517.3506
Fluid	Air (to be filtered by $\leq 40 \mu\text{m}$ filter element)								
Acting	Piloted								
Port size	In = Out = Exhaust = 1/4"			In = Out = 3/8" Exhaust = 1/4"			In = Out = Exhaust = 1/2"		
Valid area of section	25.0 mm <sup>2</sup> (Cv = 1.40)		18.0 mm <sup>2</sup> (Cv = 1.00)	30.0 mm <sup>2</sup> (Cv = 1.68)		18.0 mm <sup>2</sup> (Cv = 1.00)	50.0 mm <sup>2</sup> (Cv = 2.79)		30.0 mm <sup>2</sup> (Cv = 1.68)
Valve type	5 port 2 position		5 port 3 position	5 port 2 position		5 port 3 position	5 port 2 position		5 port 3 position
Operating pressure	1.5 to 8 bar (0.15 to 0.8 MPa; 21 to 114 psi)								
Proof pressure	15 bar (1.5 MPa; 215 psi)								
Temperature	-20 to 70 °C								
Material of body	Aluminum alloy								
Lubrication	Not required								
Max. frequency	4 cycle/s		3 cycle/s	4 cycle/s		3 cycle/s	3 cycle/s		
Weight	310 g	400 g	450 g	310 g	400 g	450 g	590 g	720 g	770 g
Flow rate measurement at P <sub>1</sub> = 8 bar, P <sub>2</sub> = 6.3 bar and pressure drop $\Delta p = 1$ bar	1300 l/min		950 l/min	1500 l/min		950 l/min	2000 l/min		1600 l/min

### Port identification pneumatic valves

	Designation at the valve	Corresponds to ISO 1219-1
Input port	P	1
Output port	A	2
Output port	B	4
Exhaust port	R	3
Exhaust port	S	5
Control port	Y	12
Control port	Z	14

### Ordering information

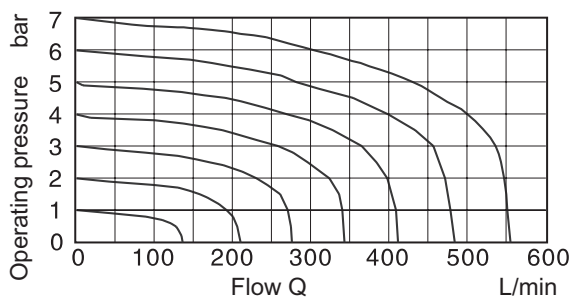
Type No.	Type
517.2000–517.2106	5/2-way pilot valve, monostable
517.2200–517.2306	5/2-way pilot valve, bistable
517.3000–517.3106	5/3-way pilot valve, mid-position closed
517.3200–517.3306	5/3-way pilot valve, mid-position exhausted
517.3400–517.3506	5/3-way pilot valve, mid-position pressurised

## »4V« Series

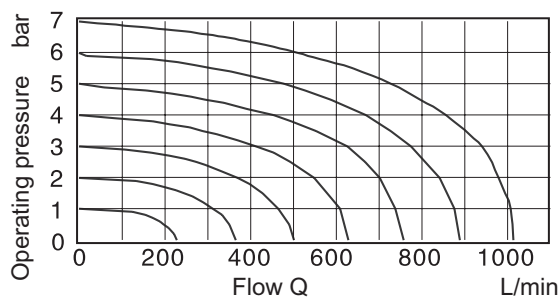
517.2000–517.2306, 517.3000–517.3506

### Flow chart

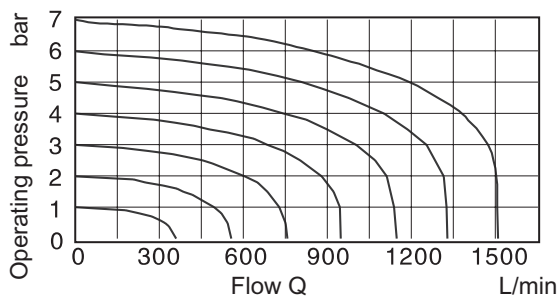
517.2000, 517.2100



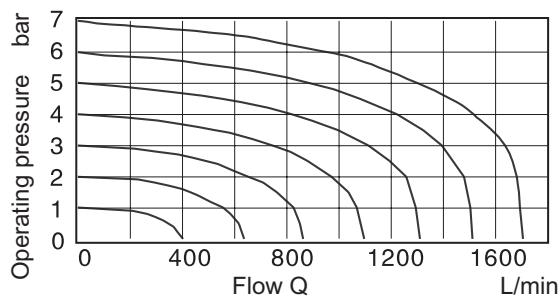
517.2001, 517.2101



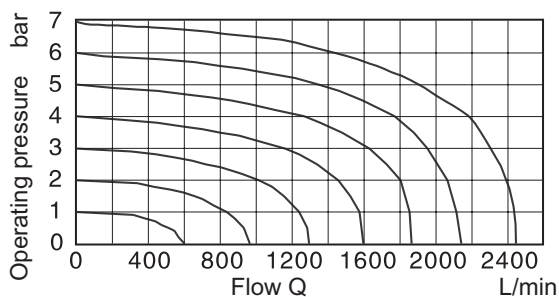
517.2002, 517.2102



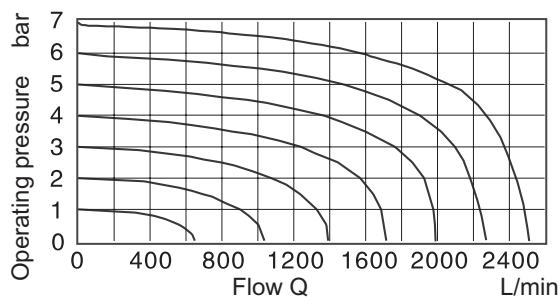
517.2003, 517.2103



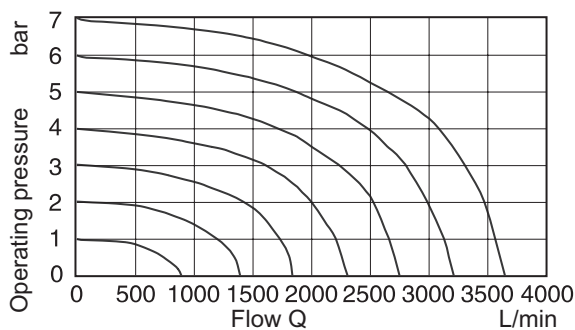
517.2004, 517.2104



517.2005, 517.2105



517.2006, 517.2106



## »4V« Series

517.1000–517.1505

### Solenoid coil for 3V/4V Series

Art. No.	Type No.	for size	Power supply	Power consumption
117910	MS230VAC-1	100	230 V AC, 50 Hz	3.5 VA
117911	MS24VDC-1		24 V DC	2.5 W
117912	MS110VAC-1		110 V AC, 50 Hz	3.5 VA
117913	MS24VAC-1		24 V AC, 50 Hz	4.0 VA
117914	MS12VDC-1		12 V DC	2.5 W
117915	MS230VAC-234	200 to 400	230 V AC, 50 Hz	4.5 VA
117916	MS24VDC-234		24 V DC	3.0 W
117917	MS110VAC-234		110 V AC, 50 Hz	4.5 VA
117918	MS24VAC-234		24 V AC, 50 Hz	5.0 VA
117919	MS12VDC-234		12 V DC	3.0 W



### Technical data - Solenoid coil for 3V/4V Series

Protection class	IP65, DIN 40050
Temperature class	Class B

### Connector for 3V/4V Series

Art. No.	Type No.	for size	Voltage	Electrical connection	Signal time
117920	GSAC100	100	AC	Connector type C	≤ 0,05 s
117921	GSDC100		DC	Connector type C	
117922	GSAC200-400	200 to 400	AC	Connector type B	
117923	GSDC200-400		DC	Connector type B	

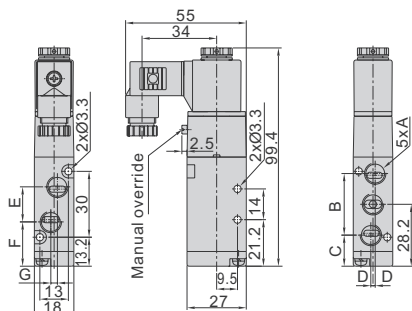


## »4V« Series

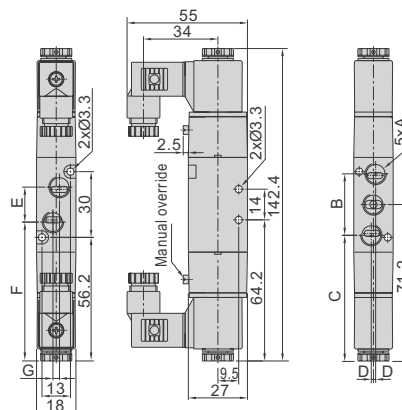
517.2000–517.2306, 517.3000–517.3506

### Dimensions

517.2000, 517.2100, 517.2001, 517.2101



517.2200, 517.2300, 517.2201, 517.2301



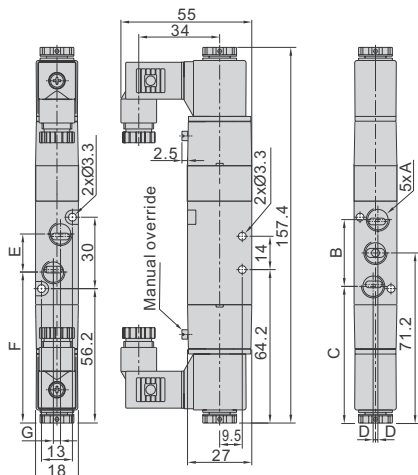
Art. No.	A	B	C	D	E	F	G
517.2000 517.2100	M5x0.8	27	14.7	0	14	21.2	0
517.2001 517.2101	1/8" <sup>1)</sup>	28	14.2	1	16	20.2	3

(Values in mm, exception <sup>1)</sup> = inch)

Art. No.	A	B	C	D	E	F	G
517.2200 517.2300	M5x0.8	27	57.7	0	14	64.3	0
517.2201 517.2301	1/8" <sup>1)</sup>	28	57.2	1	16	63.2	3

(Values in mm, exception <sup>1)</sup> = inch)

517.3000, 517.3001, 517.3100, 517.3101, 517.3200, 517.3201,  
517.3300, 517.3301, 517.3400, 517.3401, 517.3500, 517.3501



Type No.	A	B	C	D	E	F	G
517.3000, 517.3100, 517.3200, 517.3300, 517.3400, 517.3500	M5x0.8	27	57.7	0	14	64.3	0
517.3001, 517.3101, 517.3201, 517.3301, 517.3401, 517.3501	1/8" <sup>1)</sup>	28	57.2	1	16	63.2	3

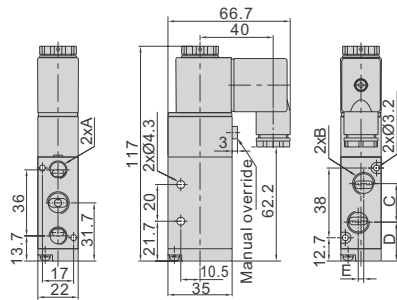
(Values in mm, exception <sup>1)</sup> = inch)

»4V« Series

517.2000–517.2306, 517.3000–517.3506

Dimensions

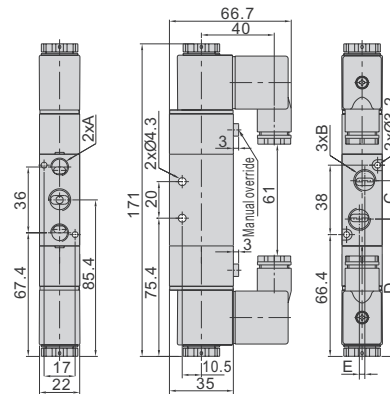
517.2002, 517.2102, 517.2003, 517.2103



Type No.	A	B	C	D	E
517.2002 517.2102	1/8"	1/8"	18	22.7	0
517.2003 517.2103	1/8"	1/4"	21	21.2	3

(Values in mm, exception A, B = inch)

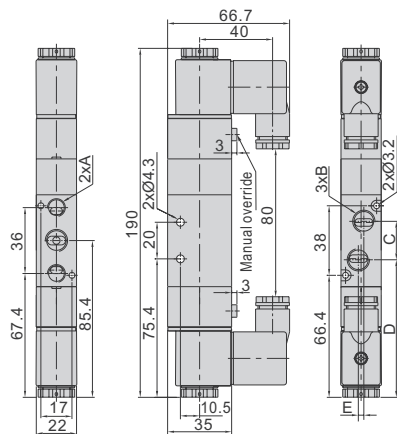
517.2202, 517.2302, 517.2203, 517.2303



Type No.	A	B	C	D	E
517.2202 517.2302	1/8"	1/8"	18	76.4	0
517.2203 517.2303	1/8"	1/4"	21	74.9	3

(Values in mm, exception A, B = inch)

517.3002, 517.3102, 517.3202, 517.3302, 517.3402, 517.3502  
517.3003, 517.3103, 517.3203, 517.3303, 517.3403, 517.3503



Type No.	A	B	C	D	E
517.3002, 517.3102, 517.3202, 517.3302, 517.3402, 517.3502	1/8"	1/8"	18	76.4	0
517.3003, 517.3103, 517.3203, 517.3303, 517.3403, 517.3503	1/8"	1/4"	21	74.9	3

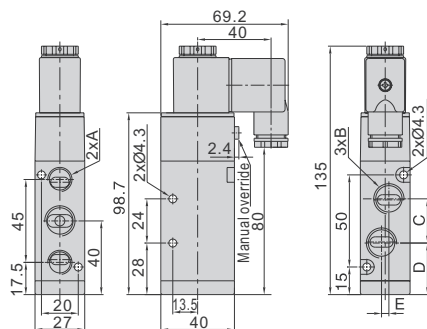
(Values in mm, exception A, B = inch)

## »4V« Series

517.2000–517.2306, 517.3000–517.3506

### Dimensions

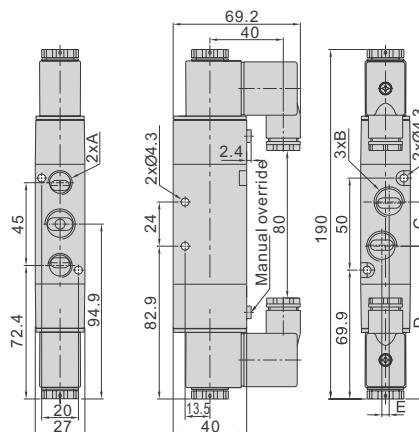
517.2004, 517.2104, 517.2005, 517.2105



Type No.	A	B	C	D	E
517.2004	1/4"	1/4"	22	29	0
517.2104	1/4"	1/4"	22	29	0
517.2005	1/4"	3/8"	24	28	4
517.2105	1/4"	3/8"	24	28	4

(Values in mm, exception A, B = inch)

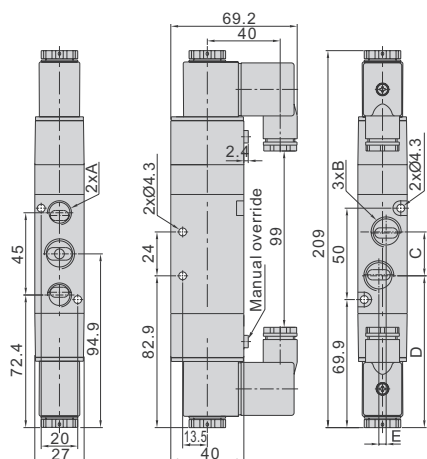
517.2204, 517.2304, 517.2205, 517.2305



Type No.	A	B	C	D	E
517.2204	1/4"	1/4"	22	83.9	0
517.2304	1/4"	1/4"	22	83.9	0
517.2205	1/4"	3/8"	24	82.9	4
517.2305	1/4"	3/8"	24	82.9	4

(Values in mm, exception A, B = inch)

517.3004, 517.3104, 517.3204, 517.3304, 517.3404, 517.3504,  
517.3005, 517.3105, 517.3205, 517.3305, 517.3405, 517.3505,



Type No.	A	B	C	D	E
517.3004, 517.3104, 517.3204, 517.3304, 517.3404, 517.3504	1/4"	1/4"	22	83.9	0
517.3005, 517.3105, 517.3205, 517.3305, 517.3405, 517.3505,	1/4"	3/8"	24	82.9	4

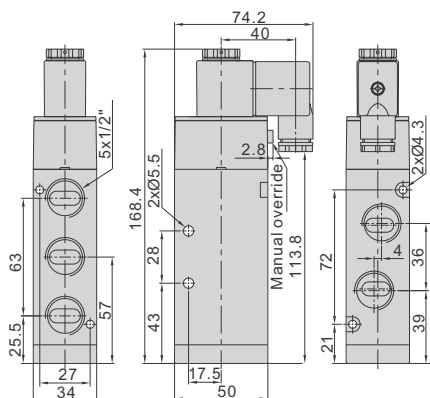
(Values in mm, exception A, B = inch)

»4V« Series

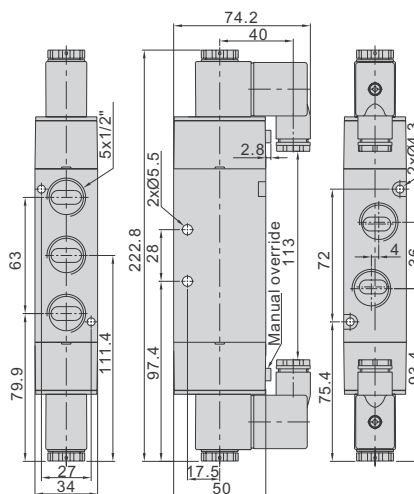
517.2000–517.2306, 517.3000–517.3506

Dimensions (mm)

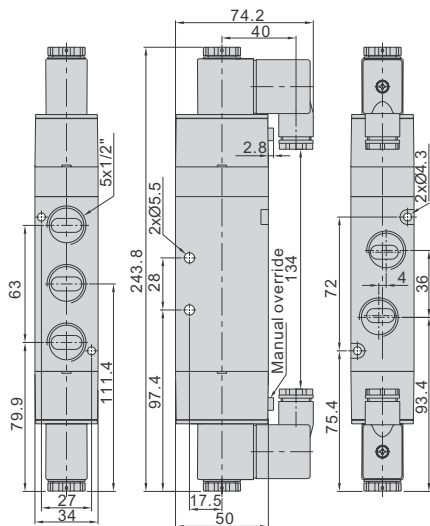
517.2006, 517.2106



517.2206, 517.2306



517.3006, 517.3106, 517.3206, 517.3306, 517.3406, 517.3506



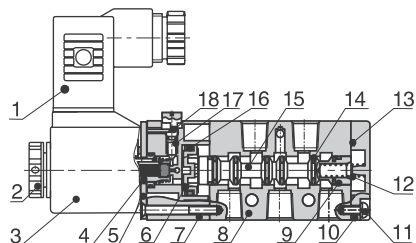


## »4V« Series

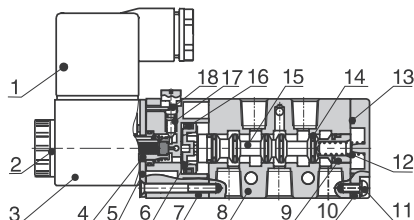
517.2000–517.2306, 517.3000–517.3506

### Components and materials

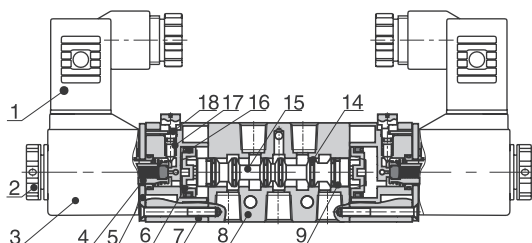
5/2-way, size 100, monostable



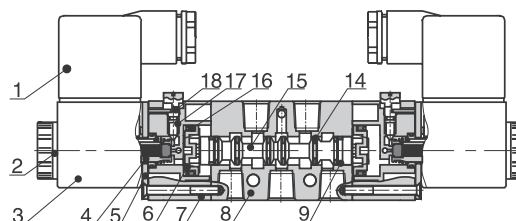
5/2-way, size 200 and 300, monostable



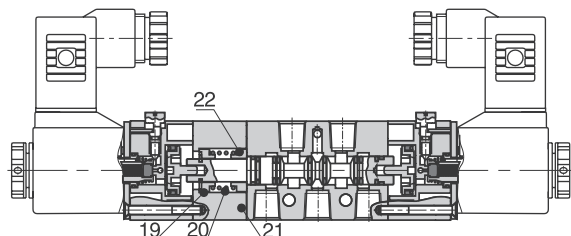
5/2-way, size 100, bistable



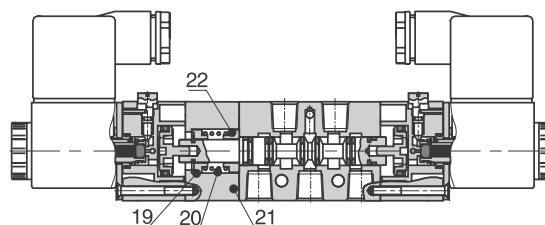
5/2-way, size 200 and 300, bistable



5/3-way, size 100



5/3-way, size 200 and 300



No.	Item	Material
1	Connector	Polycarbonate
2	Coil nut	PA66
3	Coil	
4	Armature of magnet	Stainless steel
5	Plate	Steel
6	Piston	POM
7	Pilot body	PBT
8	Body	Aluminium alloy
9	Wear ring	PA66
10	Cover	Aluminium alloy
11	Screw	Steel
12	Spring	Stainless steel
13	Cover gasket	NBR
14	O-ring	HNBR
15	Spool	Aluminium alloy
16	Piston O-ring	NBR
17	Spring	Stainless steel
18	Manual override button	Size 1 = copper, Size 2 and 3 = POM
19	Spring holder	POM
20	Spring	Stainless steel
21	Transition housing	Aluminium alloy
22	Spring holder	POM

## Ordering information

Type No.	Art. No.
517.2000	116123
517.2001	116124
517.2002	116125
517.2003	116126
517.2004	116127
517.2005	116128
217.2006	116129
517.2100	116130
517.2101	116131
517.2102	116132
517.2103	116133
517.2104	116134
517.2105	116135
517.2106	116136
517.2200	116137
517.2201	116138
517.2202	116139
517.2203	116140
517.2204	116141
517.2205	116142
517.2206	116143
517.2300	116144
517.2301	116145
517.2302	116146
517.2304	116148
517.2305	116149
517.2306	116150

## Ordering information

Type No.	Art. No.
517.3000	116151
517.3001	116152
517.3002	116153
517.3003	116154
517.3004	116155
517.3005	116156
217.3006	116157
517.3100	116158
517.3101	116159
517.3102	116160
517.3103	116161
517.3104	116162
517.3105	116163
517.3106	116164
517.3200	116165
517.3201	116166
517.3202	116167
517.3203	116168
517.3204	116169
517.3205	116170
517.3206	116171
517.3300	116172
517.3301	116173
517.3302	116174
517.3303	116175
517.3304	116176
517.3305	116177
517.3306	116178

## Ordering information

Type No.	Art. No.
517.3400	116179
517.3401	116180
517.3402	116181
517.3403	116182
517.3404	116183
517.3405	116184
217.3406	116185
517.3500	116186
517.3501	116187
517.3502	116188
517.3503	116189
517.3504	116190
517.3505	116191
517.3506	116192