

507 VALVES WITH AP-RE PNEUMATIC ACTUATOR

FEATURES

The 507+AP-RE grey cast iron ball valve is designed for the automatic opening / closing of pipes with low-pressure, non-loaded general fluids. They are full-bore, split-body valves. The 507 has a long size. The ISO 5211 mounting pad allows the actuator to be directly assembled. The pneumatic motorisation is available in double- and spring-return with numerous options.

AVAILABLE MODELS

507: long size according to EN 558-1 series 27 DN 15 to 200 except for DN125 and 150 outside standard with flange threaded holes.

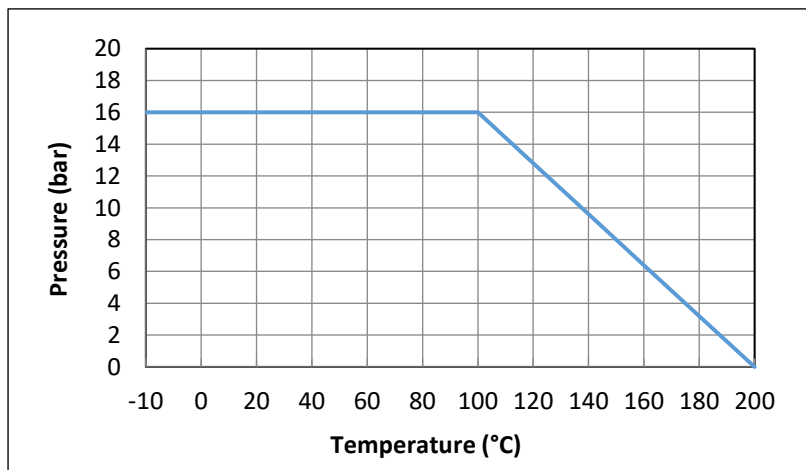
PN10/ 16 RF flange connections.

Double and spring-return actuator.



LIMITS OF USE

Fluid pressure: PS	16 bar (20°C)
Fluid temperature: WT	-10°C / +200°C
Prohibited use	Steam, compressed air and gas
Ambient temperature	-20°C / +80°C
Motor compressed air	Mini 6 bar / maxi 10 bar



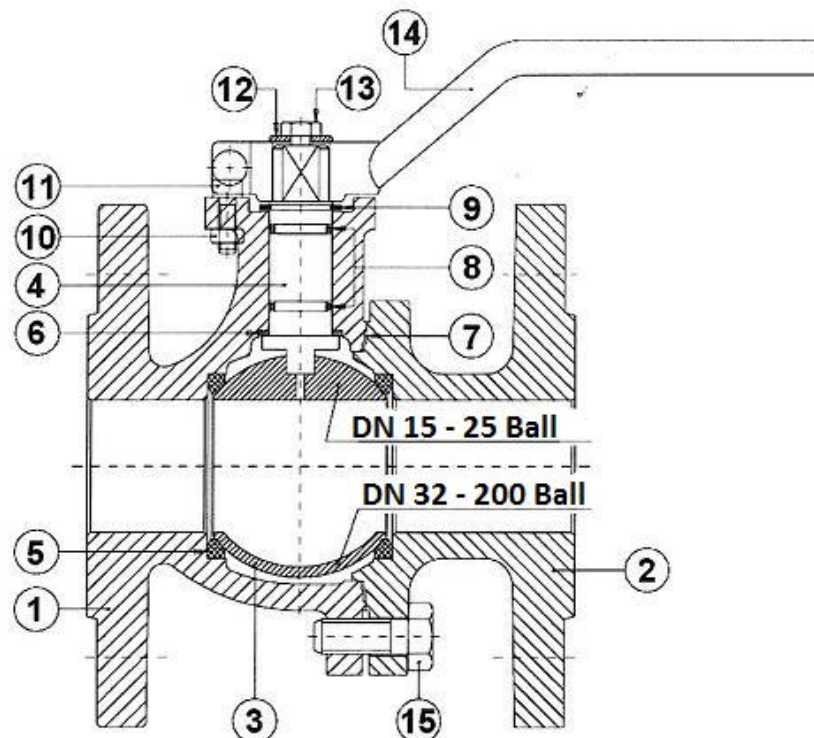
Information given as an indication only, and subject to possible modifications



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DIRECTIVES AND MANUFACTURING STANDARDS

OBJECT	Standard	OBJECT	Standard
Pressure Equipment Directive 2014/68/EC	DN 15 and 20: not subject	Final test	EN 12266-1
	DN 25 to 200 : category I	507 Face-to-face dimension	EN 558-1 series 27
Design	DIN 3357	Marking	NKS 19
Size	DIN 3840	Actuator pilot connection	NAMUR
Flange dimensions	EN 1092-2	Switch box connection	VDI/VDE 3845
Connection Motorisation	ISO 5211:		



CONSTRUCTION

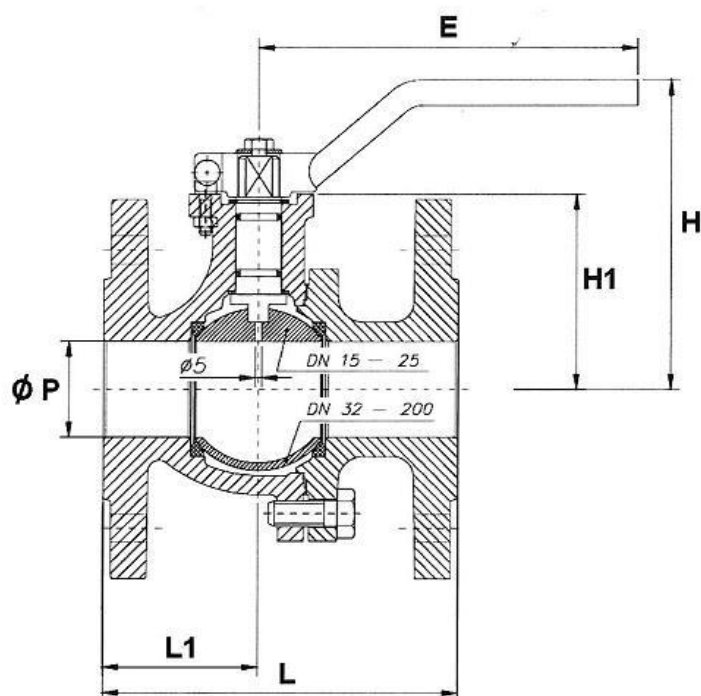
No.	Name	Material	No.	Name	Material
1	Body	EN GJL-250 cast iron	8	O-ring	FKM
2	End	EN GJL-250 cast iron	9	Washer	DIN 471 steel
3	DN 15-25 ball	303 stainless steel	10	Nut	DIN 934-8 steel
3	DN 32-200 ball	304 stainless steel	11	Screw	DIN 912- 8.8 steel
4	Stem	304 SS	12	Washer	zinc-plated steel
5	Seat	PTFE	13	Screw	DIN 935 5.6
6	Friction washer	PTFE	14	Handle	steel
7	Body gasket	PTFE	15	Screw	DIN 933 5.6

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DIMENSIONS (mm)



DN	15	20	25	32	40	50	65	80	100	125	150	200
Ø P	13	17	24	31	38	50	65	80	100	125	150	200
L	115	120	125	130	140	150	170	180	190	200	210	400
L1	49	55.5	51.5	53	61	62	81.5	79	94	120.5	155	190
H	92	95.5	102.2	114.7	119	127	141	151.5	176.5	208	254.2	293.5
H1	48.5	53	59.5	72	77	85	98	108.5	134	165	190	229
E	170	170	170	170	302.5	302.5	224	335	350	350	500	500
Weight (kg)	02:12	2.72	3.62	05:32	6.90	09:00	11.7	14.7	20.2	33.8	49.8	81.8

FLOW-RATE COEFFICIENT Kv (m³/h)

DN	15	20	25	32	40	50	65	80	100	125	150	200
Kv	37.4	74.8	105	176	223	416	660	1200	1980	3600	5040	10890

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AP-RE PNEUMATIC MOTORISATION

The ALPHAIR motorisation proposed as standard comprises:

- rack and pinion actuator of anodised aluminium
- a safety coefficient of 1.3 minimum compared to the nominal torque of the valve.
- air non-lubricated dry motor, minimum 6 bar pressure,
- an upstream / downstream pressure difference $\Delta P=10$ bar max.

The actuator mount is a yoke + stainless steel driver according to the EN 15081 standard.


DN	Double-effect	V (litres)	Time (s)*	Single-effect	V (litres)	Time (s)*
15	RE 51	0.23	1	RES 64/6	0.45	1
20	RE 51	0.23	1	RES 64/6	0.45	1
25	RE 51	0.23	1	RES 76/6	0.61	1
32	RE 51	0.23	1	RES 76/6	0.61	1
40	RE 76	0.61	1	RES 86/6	0.98	2
50	RE 76	0.61	1	RES 101/6	1.80	2
65	RE 76	0.61	1	RES 101/6	1.80	2
80	RE 86	0.98	2	RES 116/6	2.80	2
100	RE 101	1.80	2	RES 146/6	4.90	3
125	RE 116	2.80	2	RES 161/6	8.00	3
150	RE 126	3.70	3	RES 181/6	11.1	5
200	RE 161	8.00	3	RES 241/6	19.2	6

For any other operating conditions, please contact us.

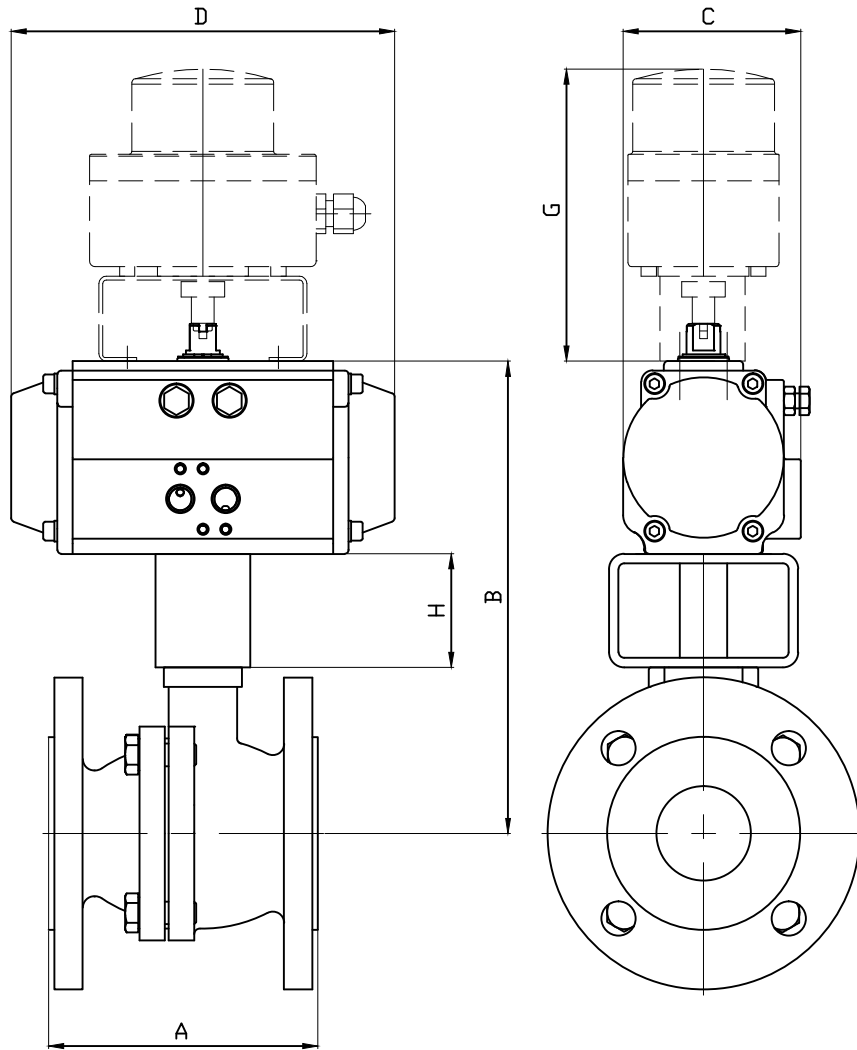
*indicative time of the no-load actuator for opening or closing.

MOTORISATION OPTIONS

There are many options, so please contact our sales service for more information on these:

1	actuators dimensioned for a compressed air pressure of 3, 4 or 5 bar	
2	actuator dimensioned for an upstream / downstream pressure difference ΔP greater than 10 bar	
3	actuator with special coatings, stainless steel actuator	
4	Actuator for very low (-60°C) or very high ($+150^{\circ}\text{C}$) ambient temperatures.	
5	manual override with declutchable gear box	
6	compressed air filter regulator	
7	All types of piloting solenoid valves	
8	all types of switch boxes	
9	all types of positioner	
10	quick exhaust	
11	flow-rate limiters - exhaust brakes	

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DN	15		20		25		32		40		50		65		80		100		
ALPHAIR	RE51	RES64	RE51	RES64	RE51	RES76	RE51	RES76	RE76	RES86	RE76	RES101	RE76	RES101	RE86	RES116	RE101	RES146	
A	115		120		125		130		140		150		170		180		190		
B	175.5	194.5	182	199	188.5	221.5	201	234		249	247	272	260	285	280.5	314	341	391	
C	75	86	75	86	75	94	75	94	94	104	94	120	94	120	104	133.5	120	164.5	
D	138	155	138	155	138	203	138	203	203	239	210	280.5	203	261	239	304	261	398	
H	60		60		60		60		60		60		60		60		80		
G	154.5		154.5		154.5		154.5		154.5		154.5		154.5		154.5	164.5	154.5	164.5	
KG	5.22	5.93	5.62	6.34	5.82	7.94	6.72	8.86	10	11.8	12.07	15.83	15.77	19.53	20.17	26.08	25.8	41.06	
DN	125		150		200														
ALPHAIR	RE116	RES161	RE126	RES181	RE161	RES241													
A	200		210		400														
B	390.5	441	427.5	490	505	607													
C	133.5	182	144.5	203.5	182	300													
D	304	424	333	482	424	604													
H	80		80		80														
G	164.5	184.5	164.5	184.5	184.5														
KG	39.05	55.43	50.9	65.32	108.85	164.4													