

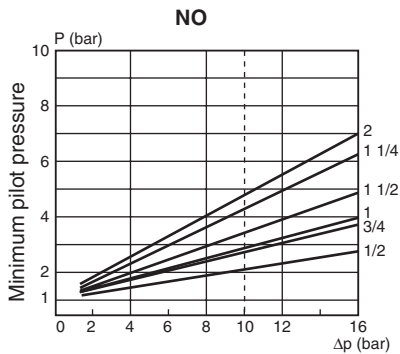
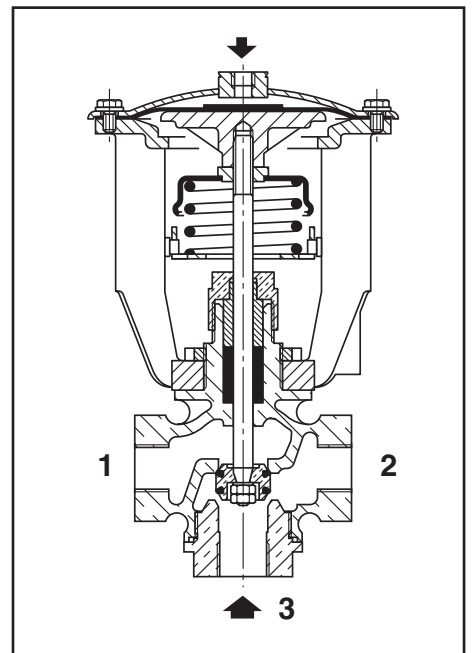
FEATURES

- Differential-action valve for high-pressure fluid control at reduced piloting pressure
- Heavy-duty valve recommended for demanding applications
- Available with several accessories and options to handle the majority of industrial applications
- The valves satisfy Pressure Equipment Directive 2014/68/EU, category 1 (DN > 25) or article 4.3 (DN ≤ 25)

GENERAL

fluids (*)	temperature range	disc seal (*)
air and gas groups 1 & 2 water, oil, liquids groups 1 & 2 and steam	- 10°C to + 184°C	PTFE

Differential pressure	0 to 16 bar [1 bar =100 kPa]
Steam	0 to 10 bar
Maximum allowable pressure	16 bar
Ambient temperature range	-5°C to +60°C
Maximum viscosity	5000 cSt (mm ² /s)
Response time	See overleaf
Pilot fluid	Water, air, filtered
Max. pilot pressure	10 bar
Min. pilot pressure	See graphs (lower pressure: see Options)



MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Valve body	Bronze
Stem	Stainless steel
Disc	Brass
Stuffing-box seal	Braided PTFE
Disc seal	PTFE
Valve body seal	FPM
Third flange connection	Brass or bronze

OTHER MATERIALS

Diaphragm (operator)	NBR
Bonnet (operator)	Steel

SPECIFICATIONS

piping (ISO 6708)		flow coefficient Kv				maximum allowable pressure (bar)	pilot pressure (bar)		catalogue number	reference
pipe size (G*)	DN	2 → 1 (m ³ /h) (l/min)		3 → 2 (m ³ /h) (l/min)			min.	max.		
NO - Normally open										
1/2	15	4,5	75	6	100	16	※	10	16600025	2703-TBT-D2
3/4	20	7,2	120	9,6	160	16	※	10	16600026	2704-TBT-D2
1	25	12	200	16,2	270	16	※	10	16600027	2705-TBT-D2
1 1/4	32	18	300	24	400	16	※	10	16600028	2706-TBT-D2
1 1/2	40	31,8	530	42,9	715	16	※	10	16600029	2707-TBT-D2
2	50	39	650	52,8	880	16	※	10	16600030	2708-TBT-D2

※ The minimum pilot pressure varies according to the differential pressure across the valve. See pilot graphs above.

OPTIONS AND ACCESSORIES

- Guard mounted on valves, 1/2 - 3/4: catalogue number **210555** / 1 - 1 1/4: catalogue number **210556** / 1 1/2 - 2: catalogue number **210557**
- Valves DN 15 to 50 to ATEX 2014/34/EU for categories 2 (II 2 GD c T6 T85°C) and 3 (II 3 GD c T6 T85°C X)
- Dry IP66 contacts
- 2 explosionproof switches with contacts for potentially explosive atmospheres to ATEX:

switch ambient temperature range	number of contacts	DN 15..32 catalogue number	DN 40..50 catalogue number
-20°C to +80°C	1	260657	260658
-20°C to +80°C	2	260660	260661
-55°C to +82°C	1	260663	260664
- Inductive M18 switch, IP66
- Inductive M18 switch, intrinsically safe to ATEX, II 1 GD EEx ia IIC T6 IP66 T85°C
- Manual override on the bonnet of the operator
- Accessories for adjustable response time (flow control, quick exhaust etc.)
- Anti-waterhammer device available with air-oil exchanger
- Backpressure applications possible by off-setting the yoke and using a reinforced spring
- Low pressure control (min. 1 bar) by off-setting the yoke
- Other types of stuffing-boxes are available depending on the nature of the fluid used
- Modifications for special environments (cold, hot, aggressive, marine etc.)
- Oxygen service, catalogue number **970509**, pressure/temperature limited to 15 bar / + 60°C
- Valve body degreased during assembly, catalogue number **970523**

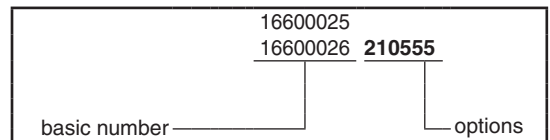
INSTALLATION

- The valves can be mounted in any position, except with the operator downwards
- Pipe connections (G*) have standard combination thread according to ISO 228/1 and ISO 7/1. Pipe connection (G) has standard thread according to ISO 228/1

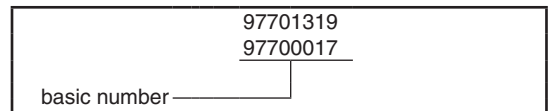
SPARE PARTS KIT & ACCESSORIES

DN	spare parts kit no.			guard catalogue number
	stem and disc unit	stuffing-box unit	NBR diaphragm	
15	97701319	97701320	97700017	88200035
20	97701321	97701320	97700017	88200035
25	97701322	97701320	97700018	88200036
32	97701323	97701324	97700018	88200036
40	97701325	97701324	97700019	88200037
50	97701326	97701327	97700019	88200037

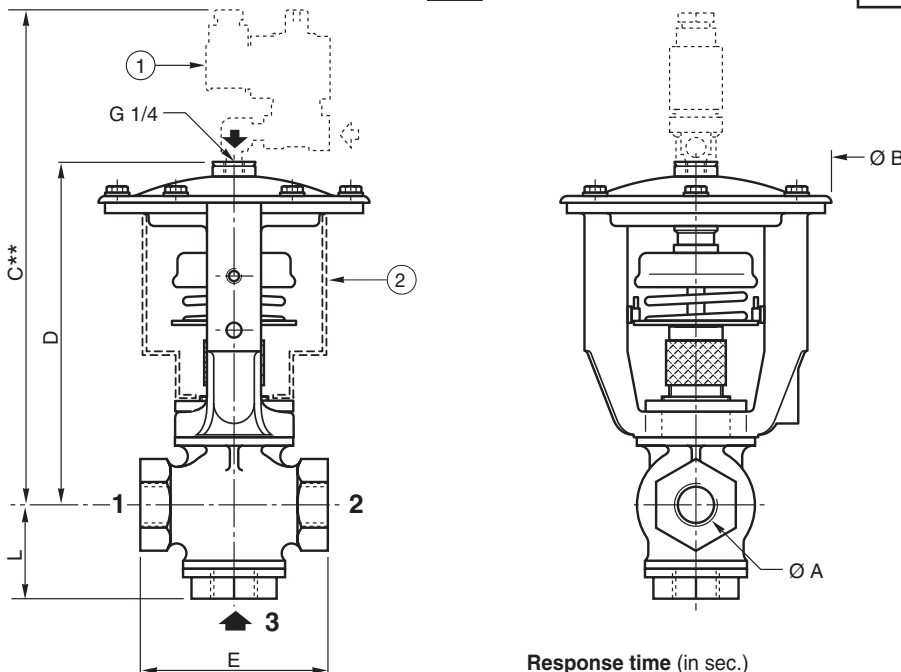
ORDERING EXAMPLES:



ORDERING EXAMPLES KITS:



DIMENSIONS (mm), WEIGHT (kg)



ØA (G*)	ØB	C**	D	E	L	weight ⁽¹⁾
1/2	127	284	165	68	39	3,5
3/4	127	289	170	84	44	4
1	156	306	187	92	52	6
1 1/4	156	311	192	110	57	6,5
1 1/2	200	343	224	125	63	12
2	200	353	234	145	71	15

Response time (in sec.)

ØA (G*)	pilot fluid (6 bar)			
	air		water	
	C	O	C	O
1/2	0,3	1	0,7	2
3/4	0,3	1	0,7	2
1	0,4	1,5	1,5	4
1 1/4	0,4	1,5	1,5	4
1 1/2	0,6	2,5	3	9
2	0,6	2,5	3	9

- ③ Solenoid pilot valves: see page : **83** ["Pressure Operated Valves (2/2)"] (www.asco.com)
- ④ Guard available as accessory, supplied separately or mounted on valve

⁽¹⁾ Weight of valve without pilot.
** Maximum value given for reference and related to choice of electric pilot.

- Response time is directly related to the Kv of the solenoid pilot valve. The time indicated at opening (O) and closing (C) of the valve is determined by a pilot (dia. 3 mm) with a Kv of 3,5.
- Consult us for shorter cycle times.