

## BALL VALVES

### Brass ball valve

#### ITEM 101 - 2-way full-bore threaded-ends

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## Features

### GENERAL FEATURES

The valve is suitable for medium pressures on condition that non aggressive fluids are used.

Working temperature: from -20 °C to +150 °C for fluids.

Working pressure: see diagram.

Fluid range: air, water, oil, gas, petroliferous and petrochemical products, vacuum.

Threaded ends as per UNI/ISO 7/1 Rp specifications.

Head of the valve as per ISO 5211 specifications.

Available version with self-scraping ball profile seal, suitable to be used with dirty fluids or with solid particles inside.

### ON REQUEST

NPT threaded ends.

For other applications, please contact our technical department.

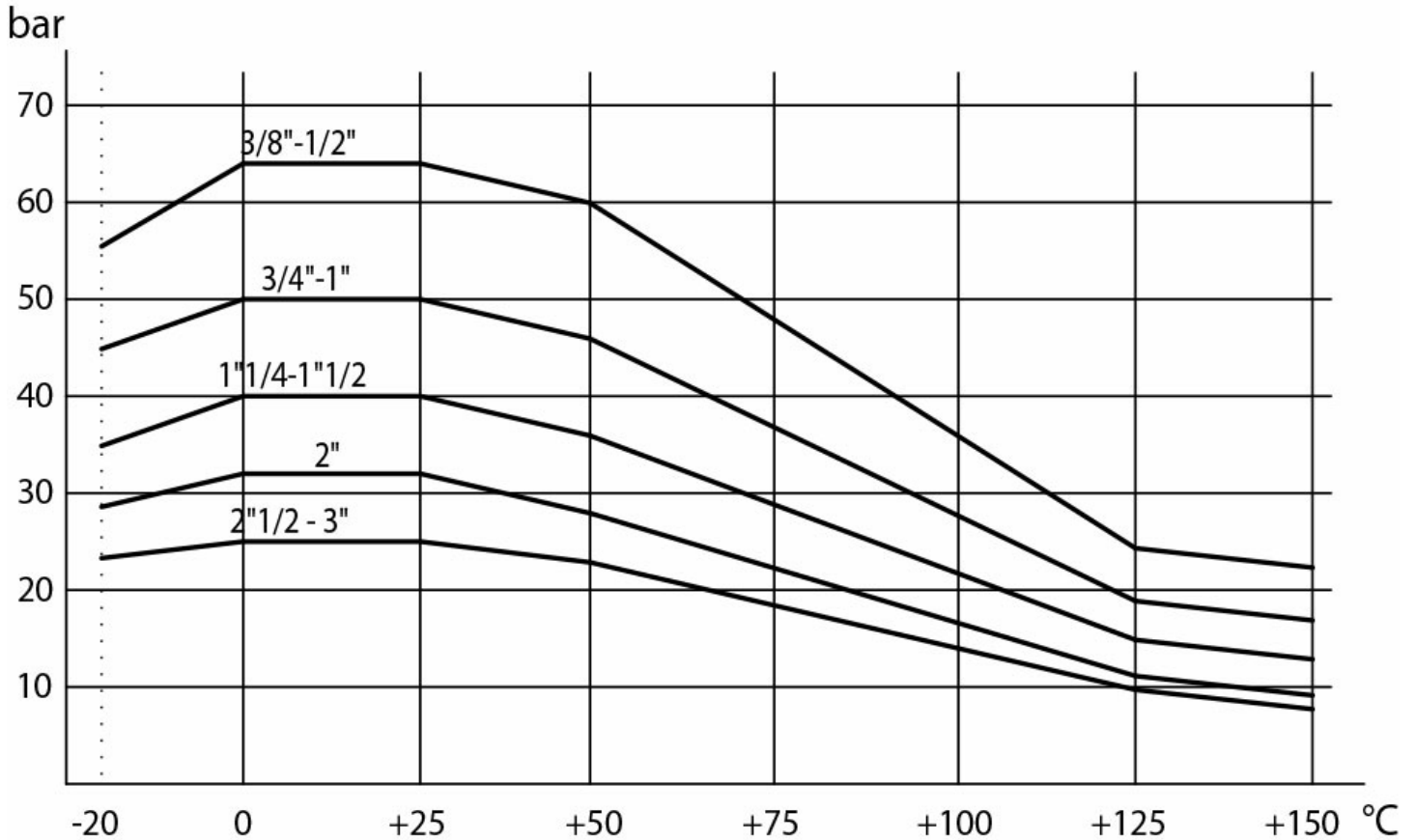
### APPROVALS

According to 97/23 EC "PED".

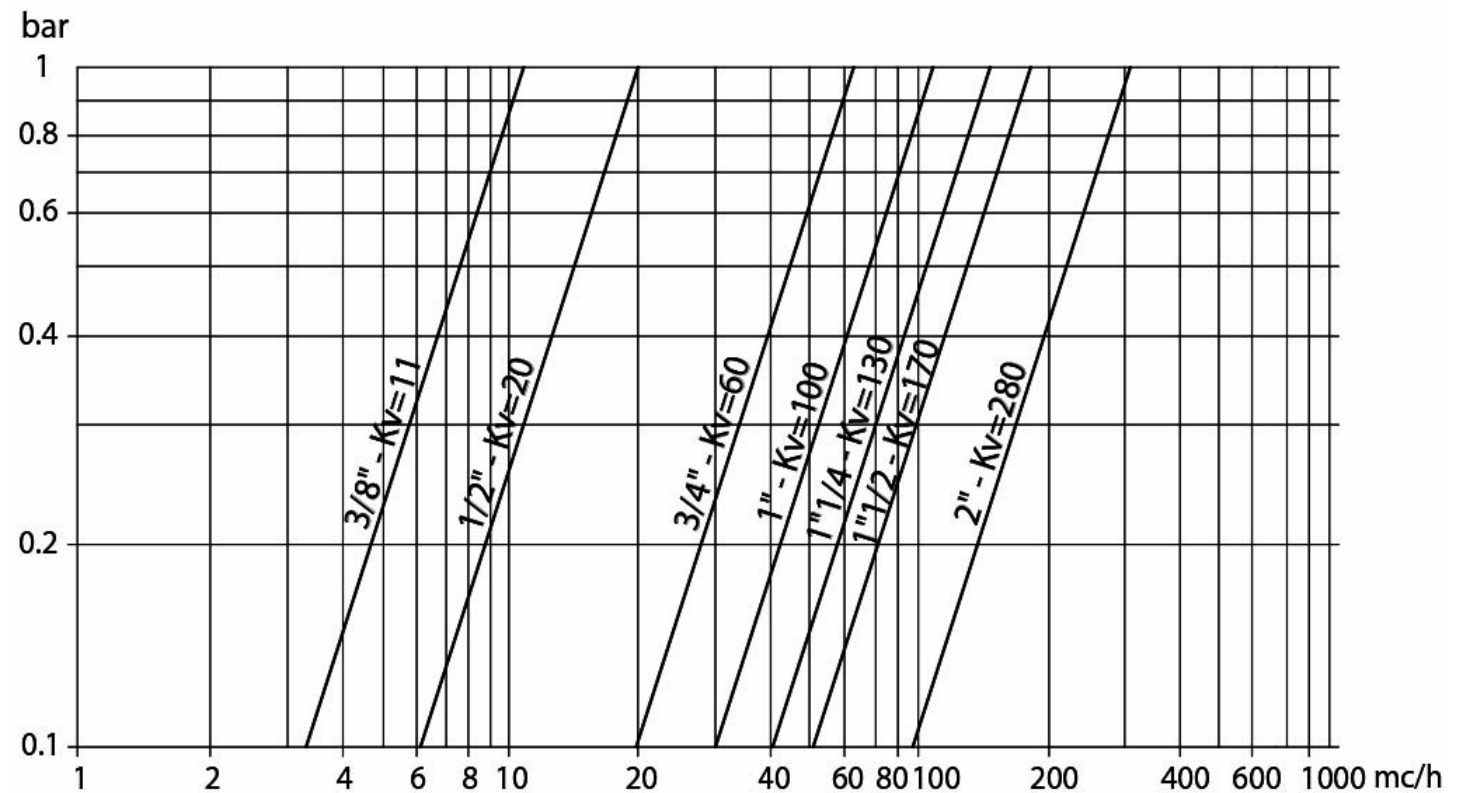
ATEX version in conformity with directive ATEX 2014-34-EU on request.

# Diagrams & breakaway torque

## PRESSURE / TEMPERATURE DIAGRAM



FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT



Nominal coefficient. Kv is the coefficient, expressed in m<sup>3</sup>/h (with water at 15°C) causing a pressure loss of 1 bar.

## BREAKAWAY TORQUES Nm

misura	DN 10 3/8"	DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 32 1 1/4"	DN 40 1 1/2"	DN 50 2"	DN 65 2 1/2"	DN 80 3"
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PN 25 bar							27	48	79
PN 40 bar					14	19			
PN 50 bar			7	10					
PN 64 bar	4	5							

Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations.

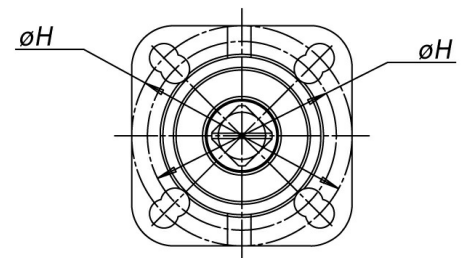
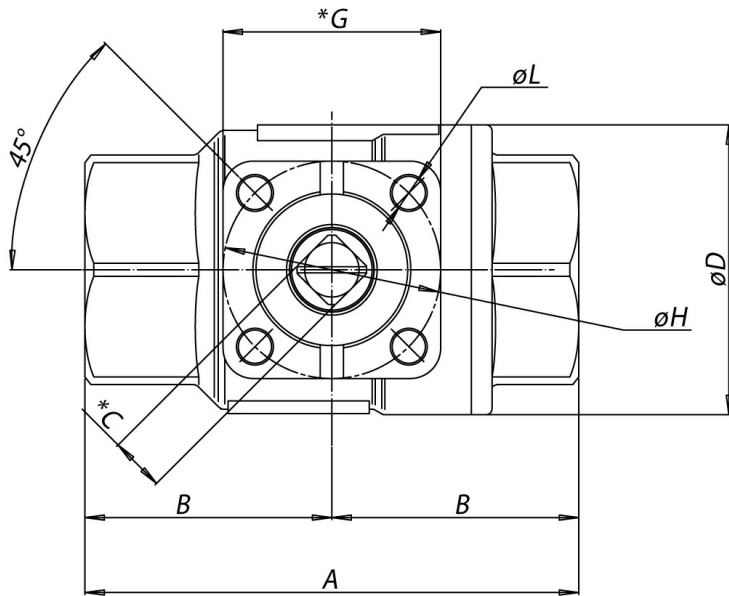
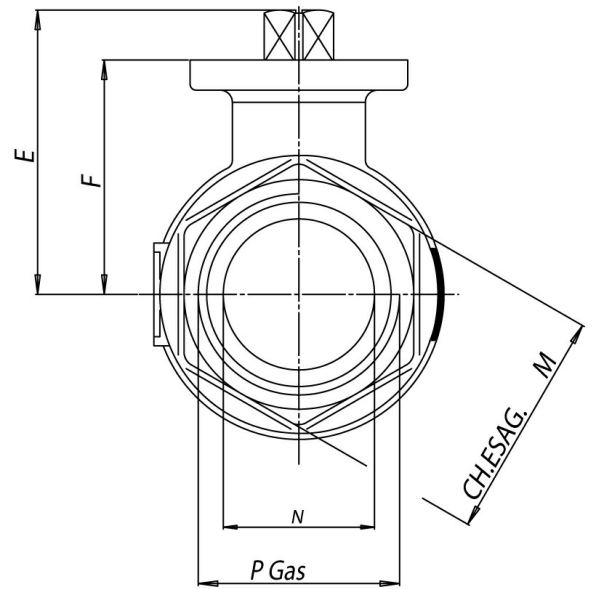
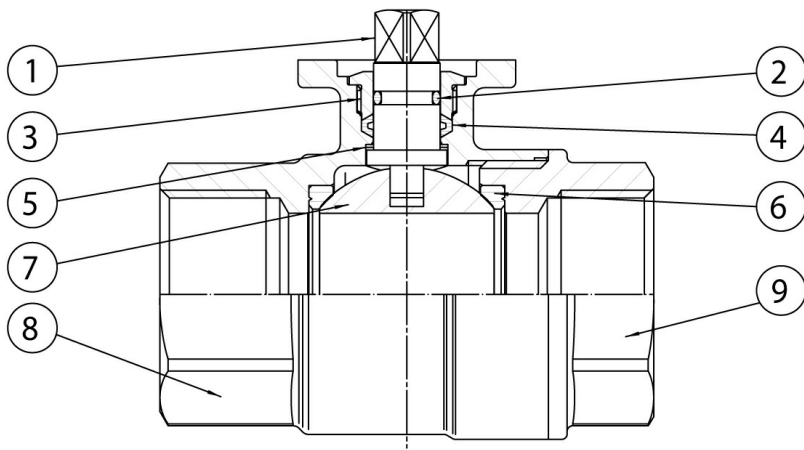
The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our technical department.

# Codes and dimensions

## 101 VALVE CODES IN STANDARD EXECUTION

size	DN 10 3/8"	DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 32 1"1/4	DN 40 1"1/2	DN 50 2"	DN 65 2"1/2	DN 80 3"
Free shaft	V101N203	V101N204	V101N205	V101N206	V101N207	V101N208	V101N209	V101N210	V101N211
Free shaft ATEX	V101N203YX	V101N204YX	V101N205YX	V101N206YX	V101N207YX	V101N208YX	V101N209YX	V101N210YX	V101N211YX
Free shaft version with self-scraping seal					V101Z207	V101Z208	V101Z209	V101Z210	V101Z211
weight Kg.	0,33	0,29	0,43	0,66	1,07	1,52	2,62	3,98	6,68
with lever	L101N203	L101N204	L101N205	L101N206	L101N207	L101N208	L101N209	L101N210	L101N211
whit lever ATEX	L101N203YX	L101N204YX	L101N205YX	L101N206YX	L101N207YX	L101N208YX	L101N209YX	L101N210YX	L101N211YX
Free shft version with self-scraping seal					L101Z207	L101Z208	L101Z209	L101Z210	L101Z211
weigh Kg.	0,4	0,35	0,5	0,72	1,14	1,59	2,69	4,28	6,98
Lever kit	KLV10103	KLV10103	KLV10103	KLV10103	KLV10103	KLV10103	KLV10109	KLV10110	KLV10110

### MATERIALS



NELLE VERSIONI  
1" 1/4 - 1" 1/2 - 2" - 2" 1/2 - 3"  
LA FORATURA DIN F\_\_ E' DOPPIA

1) Shaft *	Brass	EN 12164 CW614N
2) O-Ring	FKM	
3) Gland nut *	Brass	EN 12164 CW614N
4) Shaft seal	P.T.F.E.	
5) Antifriction rings	P.T.F.E.	
6) Seals	P.T.F.E.	
7) Ball	Brass chromium plated	EN 12164 CW614N
8) Body *	Brass	EN 12165 CW617N
9) Threaded ends*	Brass	EN 12165 CW617N

\* Surface treatment: bright nickel plating

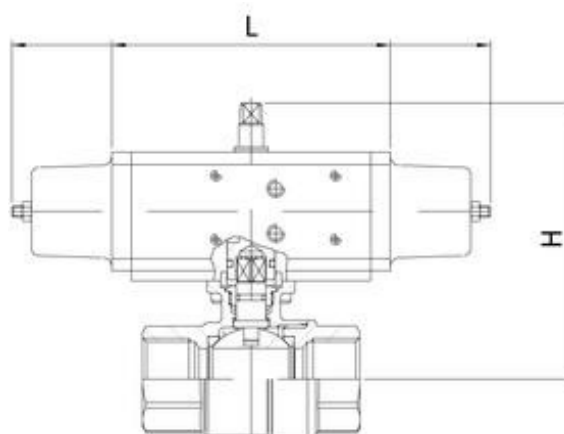
#### DIMENSIONS

Size	A	B	C	øD	E	F	G	øH	øL	ch.M	N
DN 10 - 3/8"	69	34,5	9	31,8	38,5	30,5	36	36	5,5	25	10
DN 15 - 1/2"	69	34,5	9	31,8	38,5	30,5	36	36	5,5	25	15
DN 20 - 3/4"	77	38,5	9	40	45,3	36,3	36	36	5,5	31	20
DN 25 - 1"	89	44,5	9	48	49,2	40,2	36	36	5,5	38	25
DN 32 - 1" 1/4	103	51,5	9	60	60,5	51,5	42	36/42	5,5	47	32
DN 40 - 1" 1/2	114	57	9	70,6	67	58	42	36/42	5,5	54	40

DN 50 - 2"	134	67	11	88,5	76,3	65,3	46	42/50	5,5/6,5	66	50
DN 65 - 2"1/2	161	80,5	14	112	97	83	65	50/70	6,5/8,5	84	65
DN 80 - 3"	185	92,5	14	138,4	108,5	94,5	65	50/70	6,5/8,5	98	80



## Drives - Double acting pneumatic actuator



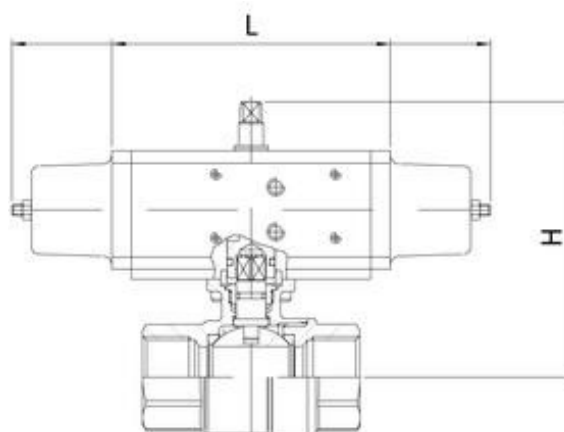
Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg	Model ATEX
D101H003	DA008401S	KCF032558	10	3/8"	70	88	0,61	D101H003YX
D101H004	DA008401S	KCF032558	15	1/2"	70	88	0,59	D101H004YX
D101H005	DA015401S	KCF032558	20	3/4"	114	103,5	1,09	D101H005YX
D101H006	DA015401S	KCF032558	25	1"	114	107,5	1,33	D101H006YX
D101H*07	DA030401S	KCF032558	32	1"1/4	130	131	2,03	D101H007YX
D101H*08	DA030401S	KCF032558	40	1"1/2	130	138	2,45	D101H008YX
D101H*09	DA045402S	KCF042559	50	2"	144	150,7	4,64	D101H009YX
D101H*10	DA090401S	KCF052566	65	2"1/2	168,5	180,5	6,5	D101H010YX
D101H*11	DA120401S	KCF052566	80	3"	185	211	10,3	D101H011YX

\*0= standard version ; \*Z= version with self-scraping seat

The sizing of pneumatic actuator has been done considering a minimum supply pressure of 5,6 barg



## Drives - Spring return pneumatic actuator



Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg	Model ATEX
S101H003	SR015401S	KCF032558	10	3/8"	221	110	1,52	S101H003YX
S101H004	SR015401S	KCF032558	15	1/2"	221	110	1,5	S101H004YX
S101H005	SR015401S	KCF032558	20	3/4"	221	117	1,64	S101H005YX
S101H006	SR015401S	KCF032558	25	1"	221	121	1,88	S101H006YX
S101H*07	SR030402S	KCF042565	32	1"1/4	240	141	2,97	S101H007YX
S101H*08	SR030402S	KCF042565	40	1"1/2	240	148	3,39	S101H008YX
S101H*09	SR045401S	KCF052004	50	2"	294	162,5	5,42	S101H009YX
S101H*10	SR090401S	KCF072567	65	2"1/2	357	209	9,2	S101H010YX
S101H*11	SR120401S	KCF072567	80	3"	368	231	14,5	S101H011YX

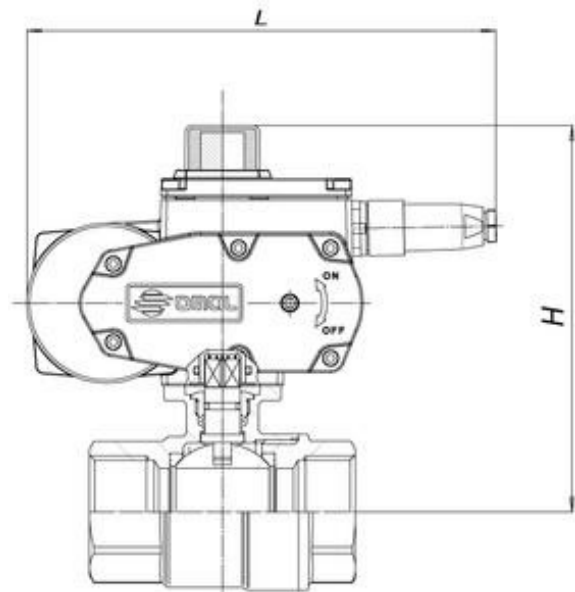
\*0 = standard version \* Z = Version with self-scraping seat

The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.





## Drives - Electrical actuators



### ON-OFF electrical actuator

Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg
C101A5E03	EA0035A5C000	KCF052003	10	3/8"	250	170	3,8
C101A5E04	EA0035A5C000	KCF052003	15	1/2"	250	170	3,8
C101A5E05	EA0035A5C000	KCF052003	20	3/4"	250	173,3	4
C101A5E06	EA0035A5C000	KCF052003	25	1"	250	177,2	4,25
C101A5E07	EA0035A5C000	KCF052003	32	1"1/4	250	188,5	4,7
C101A5E08	EA0035A5C000	KCF052003	40	1"1/2	250	195	5,1
C101A5G09	EA0070A5C000	KCF052004	50	2"	250	202,3	6,2
C101A5I10	EA0130A5C000	KCF072567	65	2"1/2	279,6	240,6	11,5
C101A5I11	EA0130A5C000	KCF072567	80	3"	279,6	252,1	14,1

### Rotary modular type electrical actuator

Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg
M10116C03	AM160002	KCF052003	10	3/8"	165,8	149	3
M10116C04	AM160002	KCF052003	15	1/2"	165,8	149	3
M10116C05	AM160002	KCF052003	20	3/4"	165,8	155,8	3,2
M10116C06	AM160002	KCF052003	25	1"	165,8	159,6	3,4
M10116F07	AM160005	KCE281944	32	1"1/4	250	252,5	5,5
M10116F08	AM160005	KCE281944	40	1"1/2	250	259	5,9
M10116F09	AM160005	KCE281943	50	2"	250	266,3	7
M10116L10	AM160020	KCE362068	65	2"1/2	279,6	304,6	12,3
M10116L11	AM160020	KCE362068	80	3"	279,6	316,1	14,9

Items are with electric actuator 230 Vac.  
ATEX version not available for electrical actuator.