

## BALL VALVES

### Brass ball valve

#### ITEM 100 - 2-way full-bore threaded-ends

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features

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diagrams & breakaway torque

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codes and dimensions

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drives

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## Features

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### GENERAL FEATURES

The valve is suitable for low 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: water, oil, gas and light applications.

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

Head of the valve as per ISO 5211 specifications

### ON REQUEST

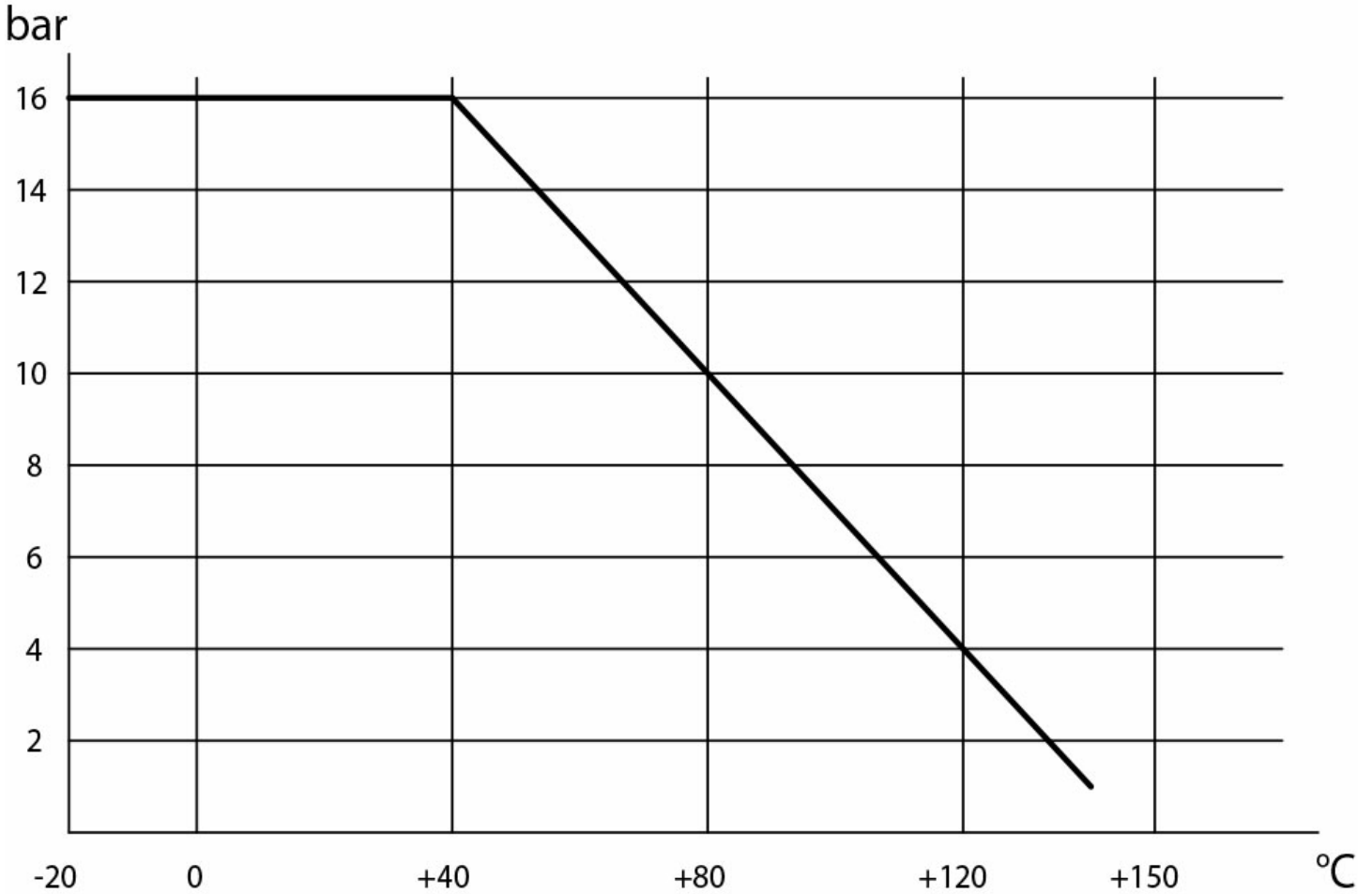
For other applications, please contact our technical department.

### APPROVALS

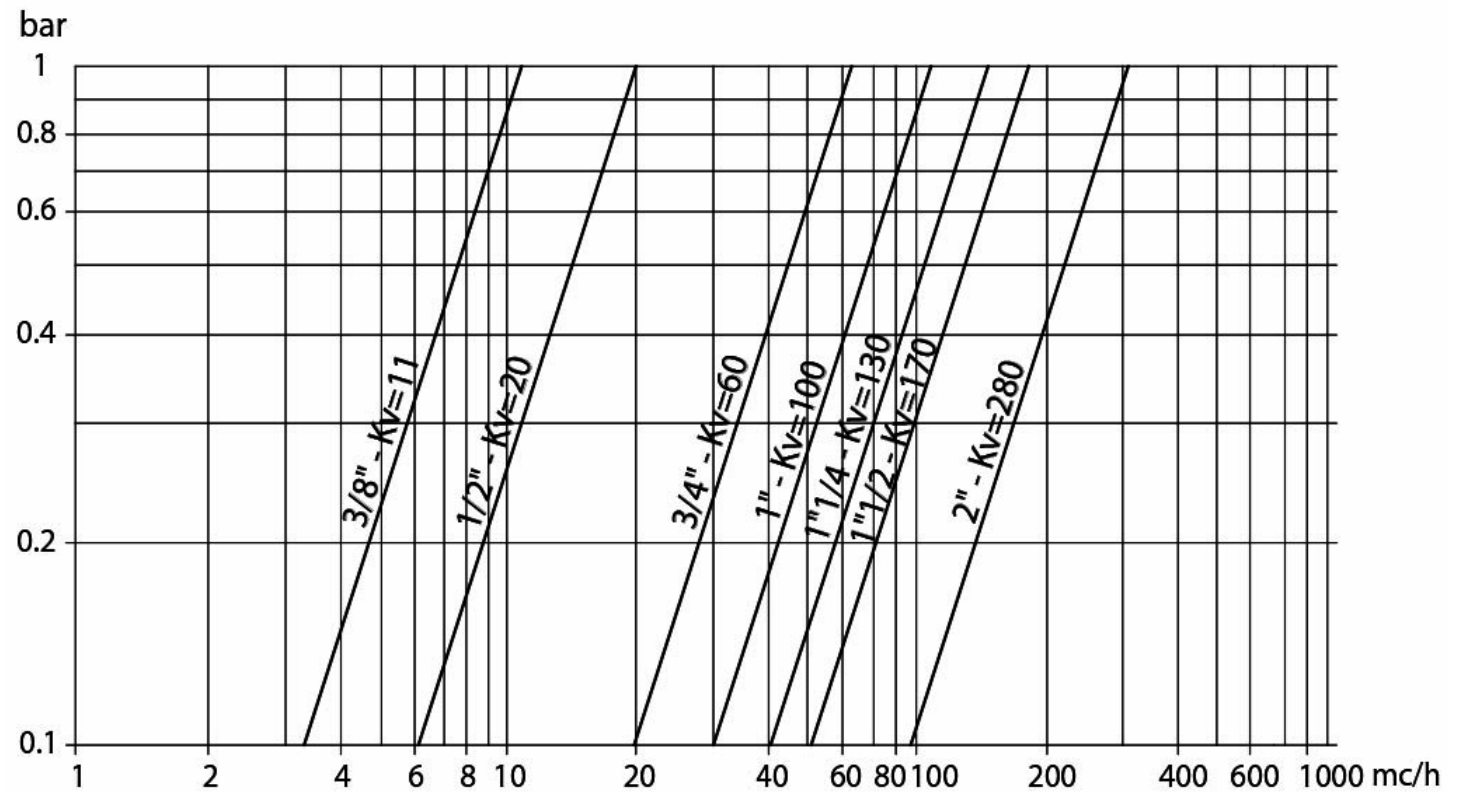
According to 97/23 EC "PED"

# Diagrams & breakaway torque

## PRESSURE / TEMPERATURE DIAGRAM



## FLOW/PRESSURE LOSS DIAGRAM AND Kv 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

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"
PN 16 bar	3	3	4	5	7	9	15

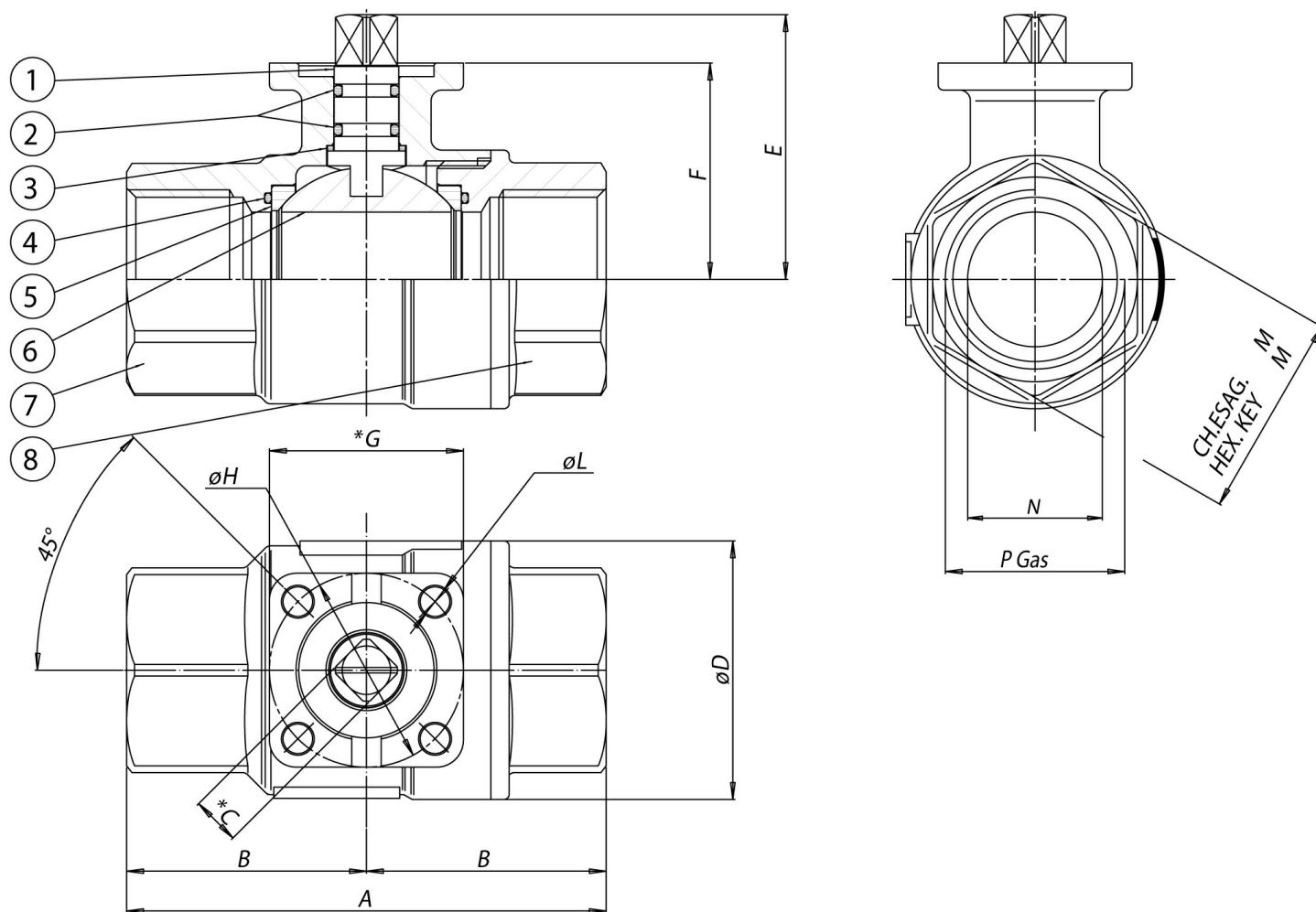
Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied.

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

## 100 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"
Free shaft	V100N203	V100N204	V100N205	V100N206	V100N207	V100N208	V100N209
weight Kg.	0,18	0,26	0,44	0,66	1,04	1,5	2,53
with lever	L100N203	L100N204	L100N205	L100N206	L100N207	L100N208	L100N209
weight Kg.	0,23	0,3	0,51	0,72	1,1	1,56	2,6
Lever kit	KLV10003	KLV10003	KLV10005	KLV10005	KLV10005	KLV10005	KLV10005



### MATERIALS

1) Shaft *	Brass	EN 12164 CW614N
2) O-Ring	FKM	
3) Top sealing	P.T.F.E.	
4) O-Ring	FKM	
5) Seals	P.T.F.E.	
6) Ball	Brass chromium plated	EN 12164 CW614N
7) Body *	Brass	EN 12165 CW617N
8) Threaded end *	Brass	EN 12165 CW617N

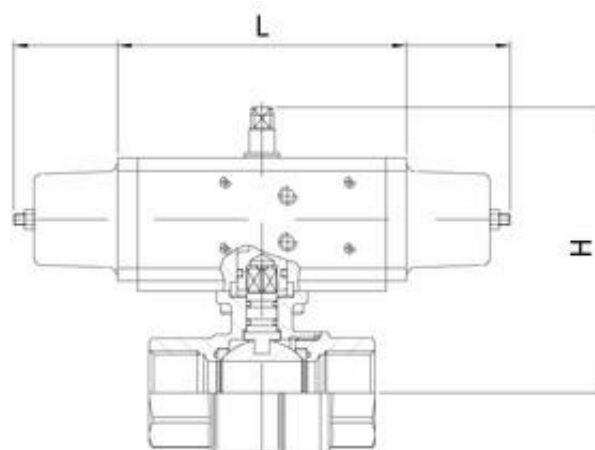
\* Surface treatment: bright nickel plating.

### DIMENSIONS

Size	A	B	C	øD	E	F	G	øH	øL	ch.M	N
DN 10 - 3/8"	69	34,5	6	31,8	36,2	29,5	36	36	5,5	25	10
DN 15 - 1/2"	69	34,5	6	31,8	36,2	29,5	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	62	59,6	50,5	42	36	5,5	47	32
DN 40 - 1 1/2"	114	57	9	72,6	66,2	57	42	36	5,5	54	40
DN 50 - 2"	134	67	9	88,5	73,5	64,3	46	36/42	5,5	66	50



## Drives - Double acting pneumatic actuator

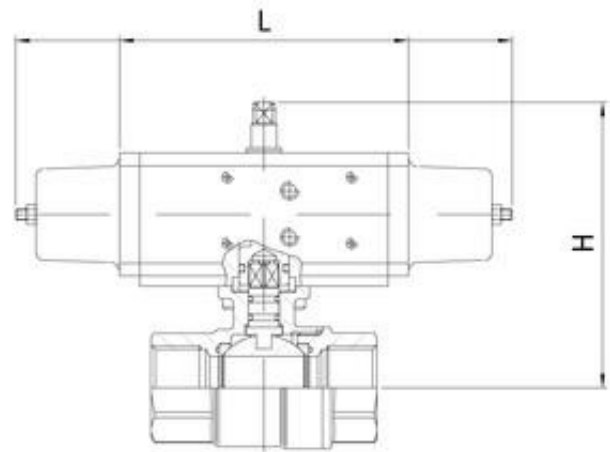


Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg
D100H004	DA008401S	KCF032557	15	1/2"	70	88	0,6
D100H005	DA008401S	KCF032558	20	3/4"	70	94	0,7
D100H006	DA008401S	KCF032558	25	1"	70	98	1
D100H007	DA015401S	KCF032558	32	1"1/4	114	123	1,9
D100H008	DA015401S	KCF032558	40	1"1/2	114	130	2,7
D100H009	DA030401S	KCF032558	50	2"	130	145	4,2

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



## Drives - Spring return pneumatic actuator

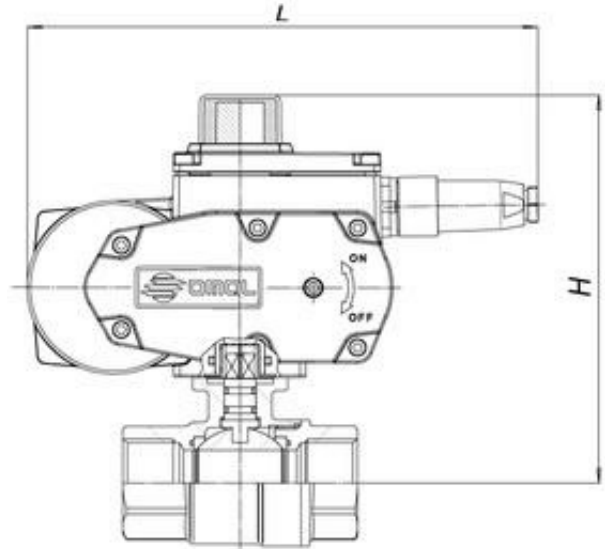


Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg
S100H003	SR015401S	KCF032557	10	3/8"	221	107	1,5
S100H004	SR015401S	KCF032557	15	1/2"	221	110	1,6
S100H005	SR015401S	KCF032558	20	3/4"	221	117	1,7
S100H006	SR015401S	KCF032558	25	1"	221	121	2
S100H007	SR015401S	KCF032558	32	1"1/4	221	131	2,5
S100H008	SR015401S	KCF032558	40	1"1/2	221	138	3,3
S100H009	SR030402S	KCF042565	50	2"	240	155	5,2

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



## Drives - Electrical actuators



### ON-OFF ELECTRICAL ACTUATOR (230 V ac)

Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg
C100A5E03	EA0035A5C000	KCF052002	10	3/8"	250	176	3,7
C100A5E04	EA0035A5C000	KCF052002	15	1/2"	250	176	3,8
C100A5E05	EA0035A5C000	KCF052003	20	3/4"	250	178	4,2
C100A5E06	EA0035A5C000	KCF052003	25	1"	250	186	4,4
C100A5E07	EA0035A5C000	KCF052003	32	1"1/4	250	187,5	4,6
C100A5E08	EA0035A5C000	KCF052003	40	1"1/2	250	194	5,1
C100A5E09	EA0035A5C000	KCF052003	50	2"	250	201,3	6,1

### ROTARY MODULAR TYPE ELECTRICAL ACTUATOR (230 V ac)

Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg
M10016C03	AM160002	KCF052002	10	3/8"	165,8	146	2.9
M10016C04	AM160002	KCF052002	15	1/2"	165,8	143	3
M10016C05	AM160002	KCF052003	20	3/4"	165,8	155,8	3,2
M10016C06	AM160002	KCF052003	25	1"	165,8	159,6	3,4
M10016C07	AM160002	KCF052003	32	1"1/4	250	187,5	4,6
M10016C08	AM160002	KCF052003	40	1"1/2	250	194	5,1
M10016F09	AM160005	KCE281944	50	2"	250	201,3	6,1

Items are with electrical actuator 230 v ac

Atex version not available for electrical actuator