

BALL VALVES

Stainless steel ball valve

ITEM 400,401 - 2-way full-bore threaded-ends

features

diagrams & breakaway torque

codes and dimension

drives



Features

GENERAL FEATURES

Suitable for middle pressure applications.

Working temperature: from -20 °C to +150 °C

Working pressure: see diagram.

Fluid range: air, water, gas, petroleum and petrochemical products, aggressive media.

Surface treatment: article 400 sandblasted; article 401 polished.

Female threaded ends as per UNI/ISO 7/1 Rp specifications.

Head of the valve as per ISO 5211 specifications.

ON REQUEST

Female threaded ends as per NPT B1.20.1 specifications

Seals made of:

- PTFE with glass;

- PTFE with carbon graphite.

For other applications, please contact our technical department.

APPROVALS

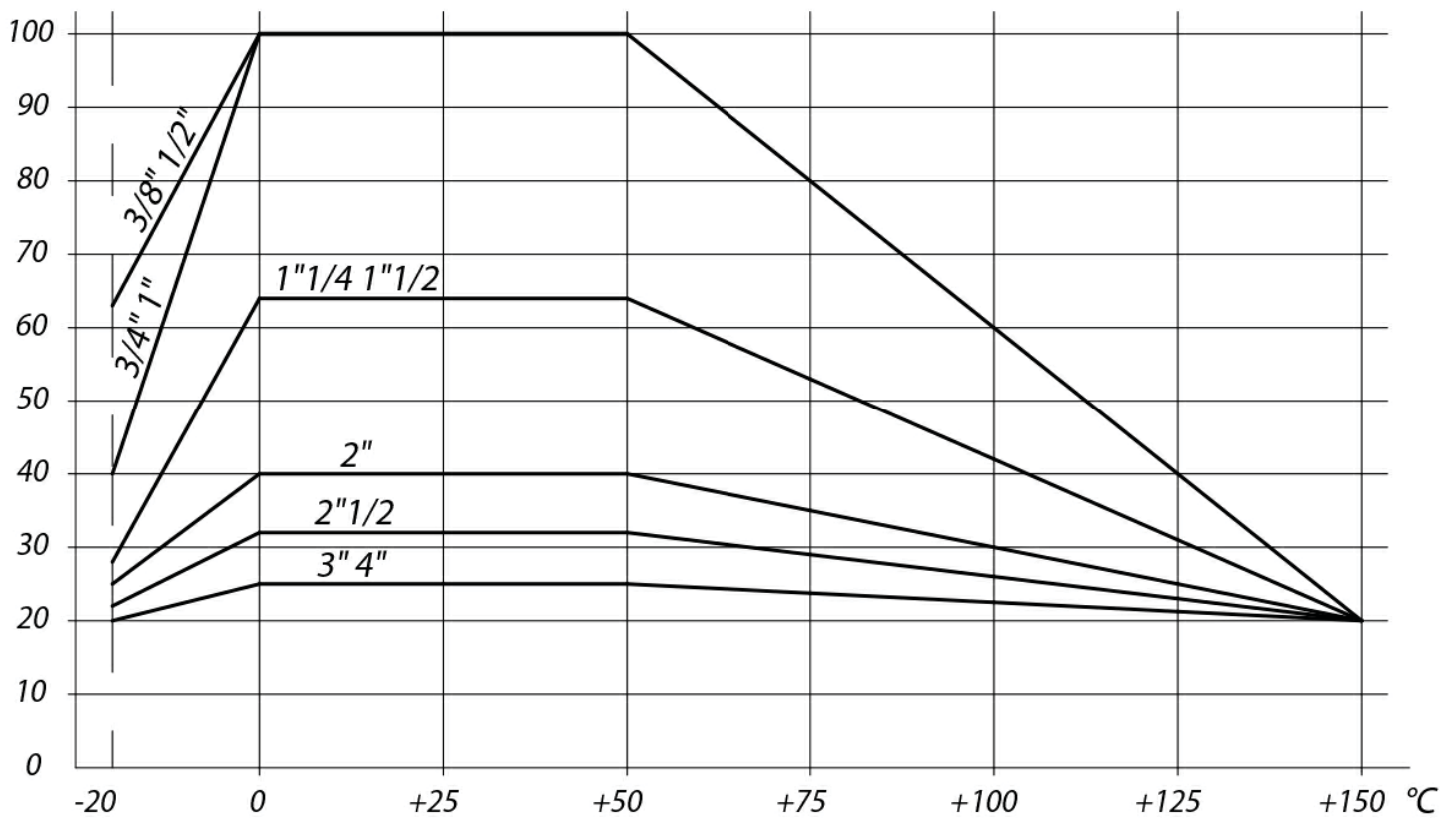
According to 97/23 EC "PED"

ATEX version on request in conformity with directive 2014-34-EU, not available for sizes DN10 3/8" e DN15 1/2"

Diagrams & breakaway torque

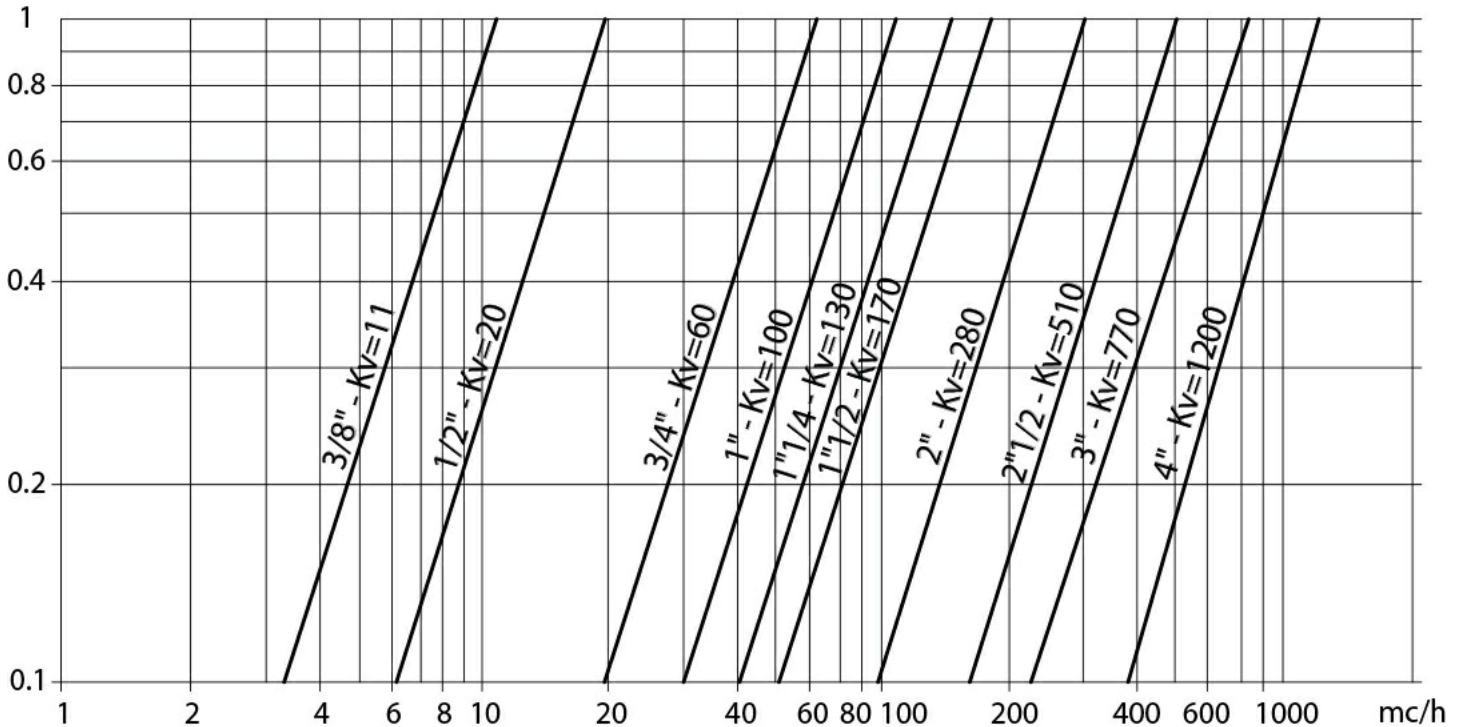
pressure/temperature diagram

bar



Flow-pressure loss diagram and Kv nominal coefficient

Bar



Kv is the coefficient, expressed in m³/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"	DN 65 2 1/2"	DN80 3"	DN100 4"
PN 25 bar								76	106	146
PN 40 bar							56			

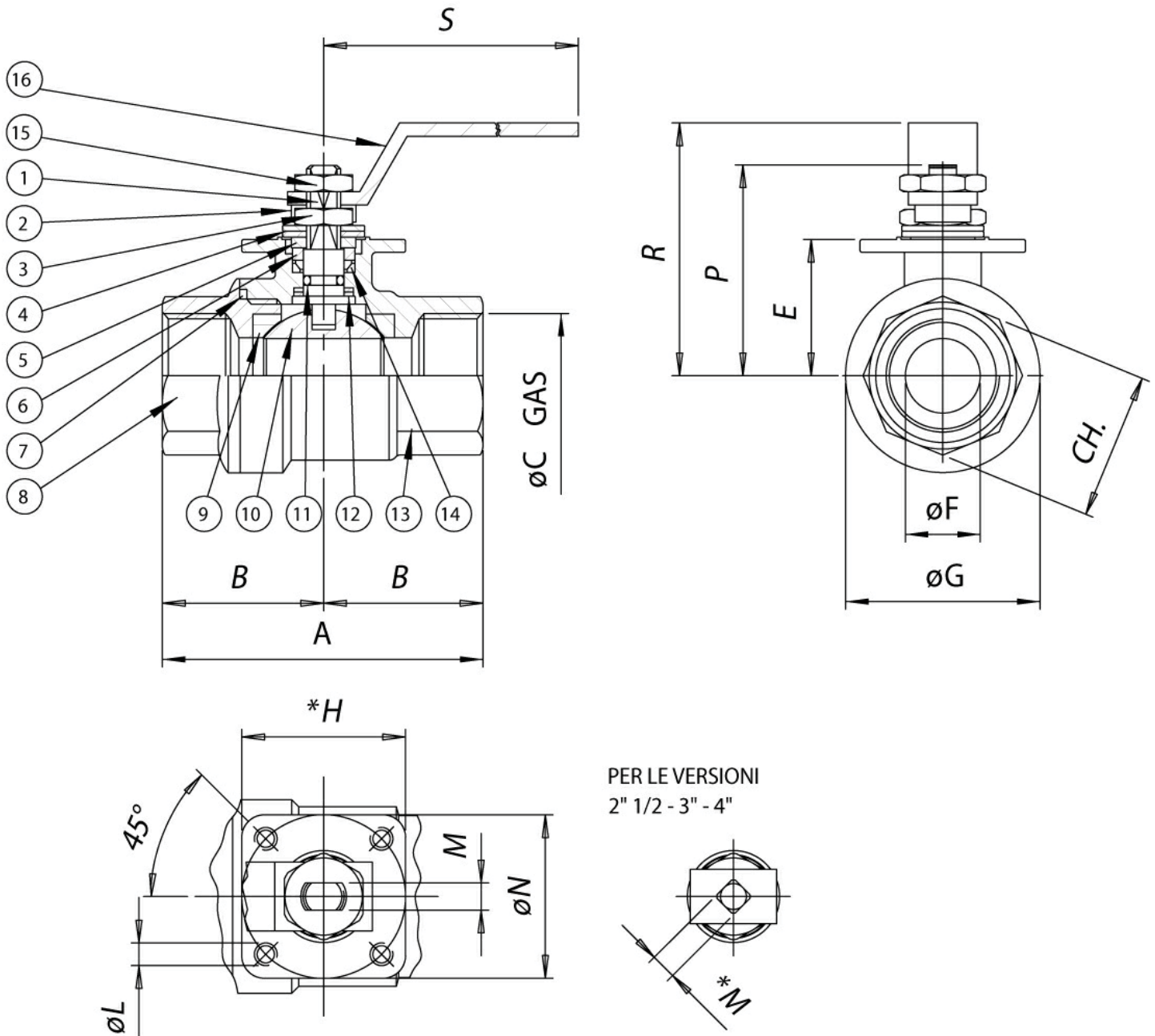
PN 63 bar					28	40				
PN 100 bar	8	10	14	20						

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 dimension

400-401 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	DN80 3"	DN100 4"
Free shaft sand blasted	V400H203	V400H204	V400H205	V400H206	V400H207	V400H208	V400H209	---	---	---
Free shaft sand blasted ATEX	---	---	V400H205YX	V400H206YX	V400H207YX	V400H208YX	V400H209YX	---	---	---
Free shaft polished	V401H203	V401H204	V401H205	V401H206	V401H207	V401H208	V401H209	V419H410	V419H411	V419H412
Free shaft polished ATEX	---	---	V401H205YX	V401H206YX	V401H207YX	V401H208YX	V401H209YX	V419H410YX	V419H411YX	V419H412YX
weight Kg.	0,24	0,32	0,51	0,77	1,27	1,81	3,2	5,47	8,92	15,9
With lever sand blasted	L400H203	L400H204	L400H205	L400H206	L400H207	L400H208	L400H209	---	---	---
With lever sand blasted ATEX	---	---	L400H205YX	L400H206YX	L400H207YX	L400H208YX	L400H209YX	---	---	---
With lever polished	L401H203	L401H204	L401H205	L401H206	L401H207	L401H208	L401H209	L419H410	L419H411	L419H412
With lever polished ATEX	---	---	L401H205YX	L401H206YX	L401H207YX	L401H208YX	L401H209YX	L419H410YX	L419H411YX	L419H412YX
weight Kg.	0,31	0,39	0,58	0,87	1,37	2,01	3,4	5,67	9,22	16,4
Seals Kit	KGBV5003	KGBV5004	KGBV5005	KGBV5006	KGBV5007	KGBV5008	KGBV5009	KGBV5010	KGBV5011	KGBV5012



MATERIALS

1) Shaft	AISI 316	14.401	UNI X5CrNiMo 17 12
2) Nut holder	AISI 304	14.301	UNI X5CrNi 18 10
3) Lock nut	AISI 304	14.301	UNI X5CrNi 18 10
4) Belleville washer	AISI 301	14.310	UNI X12CrNi 17 07
5) Washer	AISI 304	14.301	UNI X5CrNi 18 10
6) Gland nut ring	AISI 304	14.301	UNI X5CrNi 18 10
7*) Static ring	P.T.F.E.		
8) End	AISI 316	14.408	
9*) Seals	P.T.F.E.		
10) Ball	AISI 316	14.401	UNI X5CrNiMo 17 12
11*) O-ring	FKM		
12*) Bottom tight ring	P.T.F.E.		
13) Body with female end	AISI 316	14.408	
14*) Top sealing	P.T.F.E.		
15) Lever nut	AISI 304	14.301	UNI X5CrNi 18 10

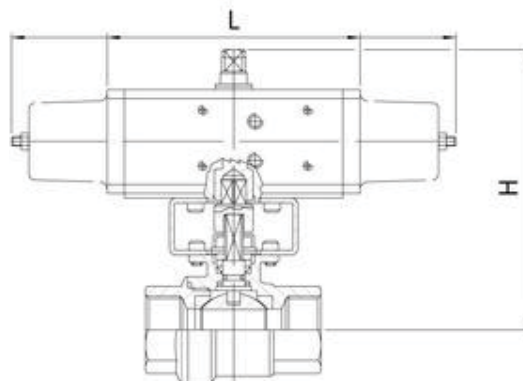
16) Lever	AISI 304	14.301	UNI X5CrNi 18 10
* Components of spare part kit KGBV50...			

DIMENSIONS

Size	A	B	øC	øD	E	F	øG	øH	øL	ch.M	N	CH	P
DN 10 3/8"	55	27,5	3/8"	37	19,5	10	29	36	m5	4	36	21,5	37
DN 15 1/2"	65	32,5	1/2"	42	24,5	15	34	36	m5	4	36	26,5	42
DN 20 3/4"	70	35	3-apr	52	30,5	20	42,5	36	m5	6	36	31,5	52
DN 25 1"	85	42,5	1"	56	34,5	25	50,5	36	m5	6	36	40,5	56
DN 32 1"1/4	95	47,5	1"1/4	68	42	32	63	42	m5	8	42	49,5	68
DN 40 1"1/2"	105	52,5	1"1/2	74	48	40	75,5	42	m5	8	42	54,5	74
DN 50 2"	125	62,5	2"	87	55	50	91	50	m6	10	50	69,5	87
DN 65 2"1/2	128	64	2"1/2	109,5	94,5	65	110	90	9	9	70	-	92
DN 80 3"	150	75	3"	121	106	80	141	90	9	9	70	-	110
DN 100 4"	178	89	4"	135	120	100	160	90	9	9	70	-	120



Drives - double acting pneumatic actuator



Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg	Model ATEX
D40*H003	DA015401S	KCF032562	10	3/8"	114	133,5	1,1	---
D40*H004	DA015401S	KCF032562	15	1/2"	114	138,5	1,2	---
D40*H005	DA030401S	KCF031315	20	3/4"	130	152,5	1,6	D40*H005YX
D40*H006	DA030401S	KCF031315	25	1"	130	156,5	1,9	D40*H006YX
D40*A007	DA045402S	KCF042354	32	1"1/4	144	171	2,5	D40*A007YX
D40*H008	DA060402S	KCF042354	40	1"1/2	152	181	3,4	D40*H008YX
D40*A009	DA090401S	KCF051322	50	2"	169	196	4,8	D40*A009YX
D419H010	DA120401S	KCF052622	65	2"1/2	184	250,5	5,6	D419H010YX
D419A011	DA180401S	KCF072623	80	3"	212	232	14,9	D419A011YX
D419H012	DA240401S	KCF072623	100	4"	242	256	23,4	D419H012YX

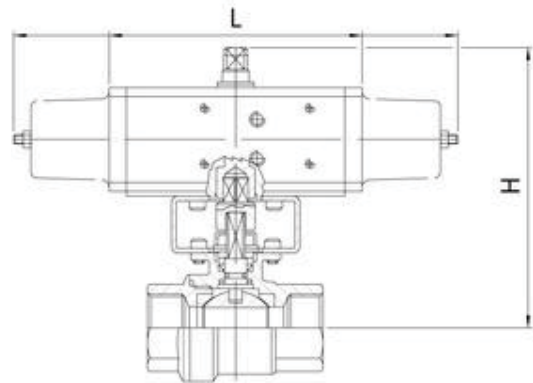
* = 0 sand blasted valve (model 400)

* = 1 polished valve (model 401)

The sizing of pneumatic actuators 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
S40*H003	SR015401S	KCF032562	10	3/8"	221	141,5	1,7	---
S40*H004	SR015401S	KCF032562	15	1/2"	221	146,5	1,8	---
S40*H005	SR030402S	KCF042353	20	3/4"	240	162,5	2,6	S40*H005YX
S40*H006	SR030402S	KCF042353	25	1"	240	166,5	2,9	S40*H006YX
S40*A007	SR045401S	KCF051909	32	1"1/4	294	183	3,7	S40*A007YX
S40*H008	SR060401S	KCF051909	40	1"1/2	320	207	5,4	S40*H008YX
S40*A009	SR090401S	KCF071323	50	2"	357	234	7,7	S40*A009YX
S419H010	SR120401S	KCF072623	65	2"1/2	372	230,5	12,6	S419H010YX
S419A011	SR180401S	KCF102624	80	3"	436	254	21,3	S419A011YX
S419H012	SR240401S	KCF102624	100	4"	460	280	29,6	S419H012YX

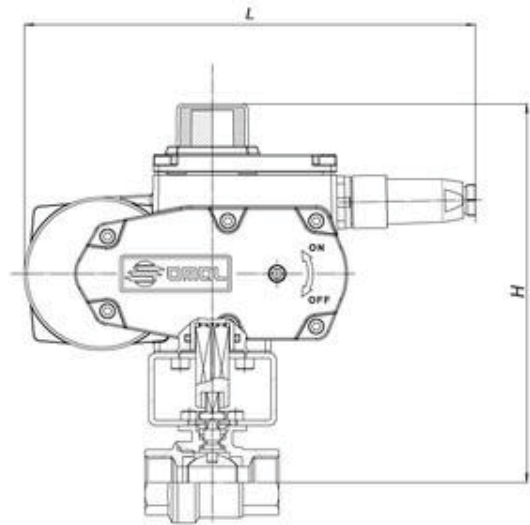
* = 0 sand blasted valve (model 400)

* = 1 polished valve (model 401)

The sizing of pneumatic actuators 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
C40*A5E03	EA0035A5C000	KCF051988	10	3/8"	250	181	3,6
C40*A5E04	EA0035A5C000	KCF051988	15	1/2"	250	186	3,6
C40*A5E05	EA0035A5C000	KCF052756	20	3/4"	250	207,5	4,1
C40*A5E06	EA0035A5C000	KCF052756	25	1"	250	211,5	4,4
C40*A5E07	EA0035A5C000	KCF051909	32	1"1/4	250	219	4,9
C40*A5G08	EA0070A5C000	KCF051909	40	1"1/2	250	225	5,4
C40*A5I09	EA0130A5C000	KCF071323	50	2"	280	262,6	10,7
C419A5I10	EA0130A5C000	KCE281855	65	2"1/2	280	252,1	13
C419A5K11	EA0240A5C000	KCE362092	80	3"	280	263,6	16,4
C419A5K12	EA0240A5C000	KCE362092	100	4"	280	277,6	23,4

* = 0 sand blasted valve (model 400)

* = 1 polished valve (model 401)

Rotary modular type electrical actuator 230 v ac

Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg
M40*16C03	AM160002	KCF051988	10	3/8"	158,5	181	3,2
M40*16C04	AM160002	KCF051988	15	1/2"	158,5	186	3,3
M40*16F05	AM160005	KCE282077	20	3/4"	250	271,5	4,9
M40*16F06	AM160005	KCE282077	25	1"	250	275,5	5,2
M40*16F07	AM160005	KCE282075	32	1"1/4	250	283	5,7
M40*16L08	AM160020	KCE362025	40	1"1/2	250	289	6,2
M40*16L09	AM160020	KCE362022	50	2"	280	326,6	11,5
M41916L10	AM160020	KCE362092	65	2"1/2	280	316,1	13,8
M41916L11	AM160020	KCE362092	80	3"	280	327,6	17,2

M41916L11	AM160020	KCE362092	100	4"	280	341,6	24,2
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* = 0 sand blasted valve (model 400)

* = 1 polished valve (model 401)

I codici sono con attatore elettrico 230 v ac

Versione ATEX non disponibile per attuatori elettrici