

BALL VALVES

Stainless steel ball valve

**ITEM 424 - 2-way full-bore three piece casted threaded-ends
or butt weld - PN 63**

features

diagrams & breakaway torque

codes and materials

drives



Features

GENERAL FEATURES

Manufactured in three pieces to facilitate replacement on plants which requires frequent maintenance.

Ends: female threads as per UNI/ISO 7/1 Rp; pocket welding; butt welding.

Standard seals: PTFE.

Working temperature: from -20 °C to +180 °C

Working pressure: see diagram.

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

Head of the valve as per ISO 5211 specifications.

ON REQUEST

Seals made of:

- RPTFE (15% glass filled),
- CTFE (25% carbon filled),
- TFM 1600.

For other applications, please contact our technical department.

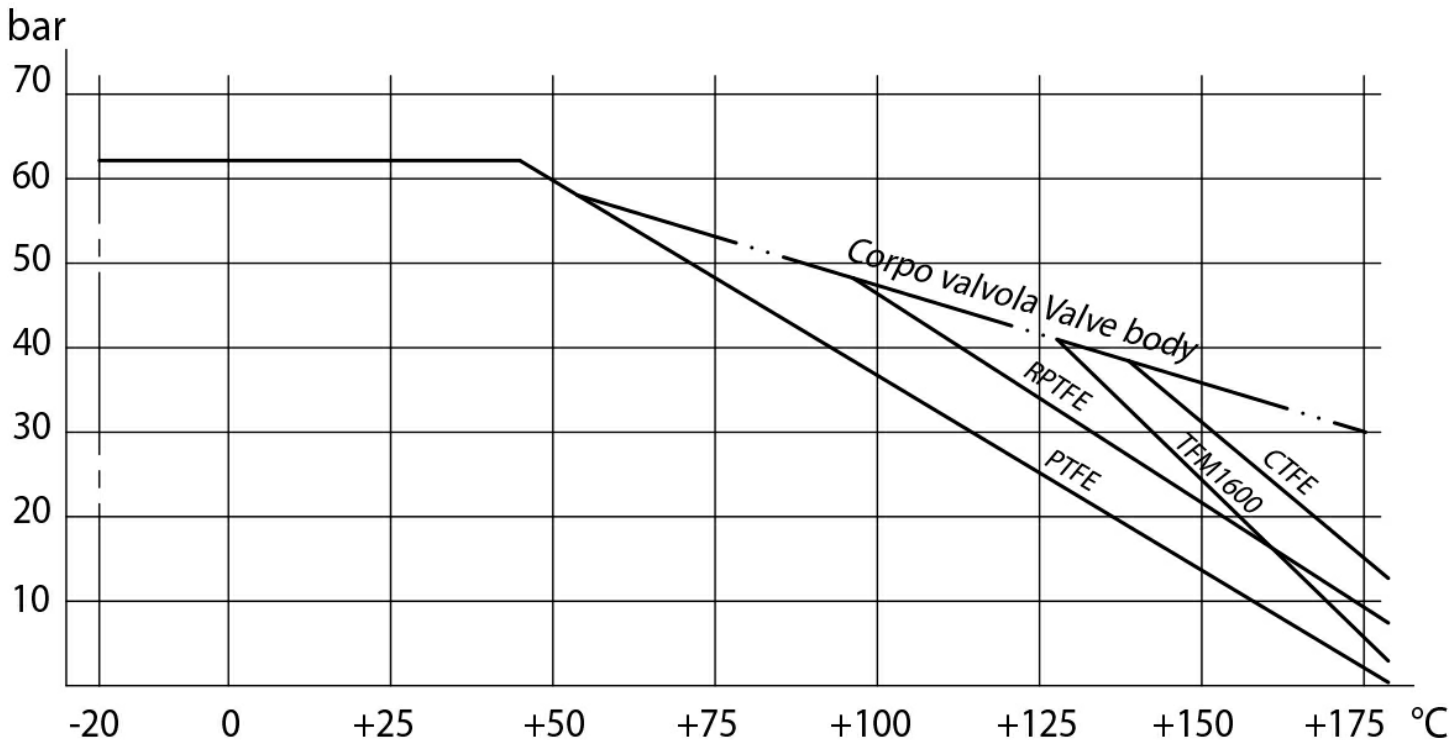
APPROVALS

According to 97/23 EC "PED"

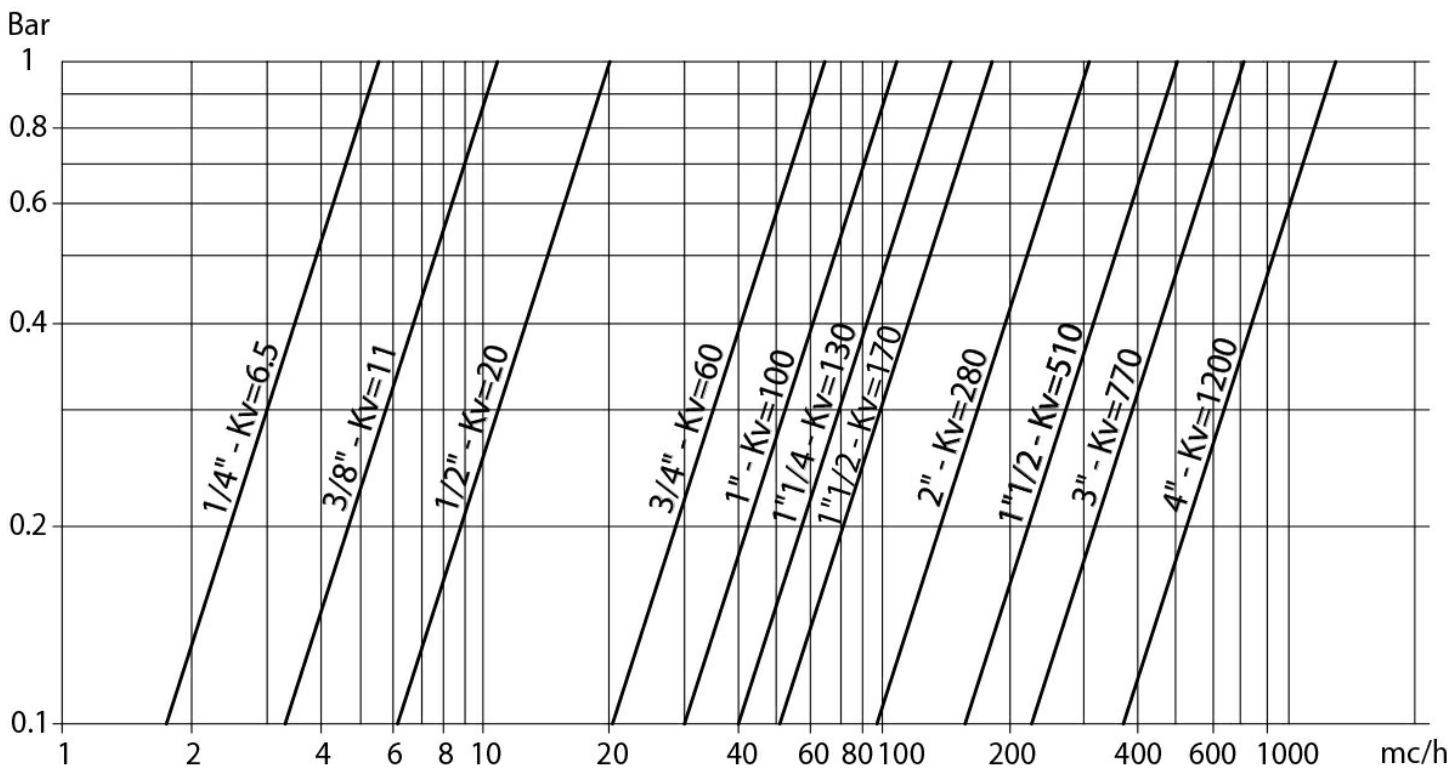
ATEX version in conformity with directive 2014-34-EU on request

Diagrams & breakaway torque

pressure/temperature diagram



Flow-pressure loss diagram and Kv nominal coefficient



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 8 1/4"	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"	DN 100 4"
PN 63 bar	6	7	8	10	14	20	29	42	85	146	235

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 materials

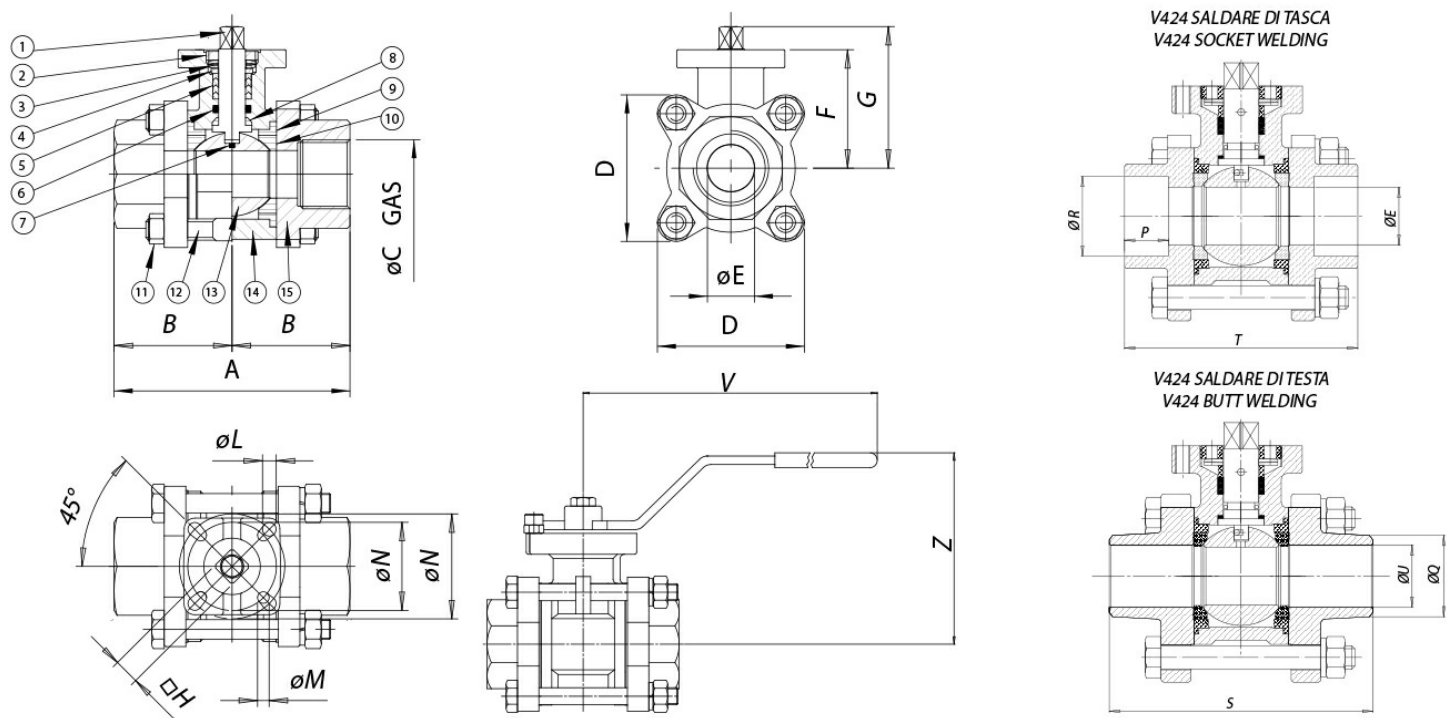
424 Valve codes in standard execution

size	DN 8 1/4"	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"	DN 100 4"
Free shaft	V424H*2	V424H*3	V424H*4	V424H*5	V424H*6	V424H*7	V424H*8	V424H*9	V424H410	V424H411	V424H412
Free shaft ATEX	V424H*2YX	V424H*3YX	V424H*4YX	V424H*5YX	V424H*6YX	V424H*7YX	V424H*8YX	V424H*9YX	V424H410YX	V424H411YX	V424H412YX
Weight Kg.	0,57	0,57	0,67	0,93	1,5	1,9	3,05	4,14	9,6	14	22,5
With lever	L424H*2	L424H*3	L424H*4	L424H*5	L424H*6	L424H*7	L424H*8	L424H*9	L424H410	L424H411	L424H412
With lever ATEX	L424H*2YX	L424H*3YX	L424H*4YX	L424H*5YX	L424H*6YX	L424H*7YX	L424H*8YX	L424H*9YX	L424H410YX	L424H411YX	L424H412YX
Lever kit	KLV42402	KLV42402	KLV42402	KLV42402	KLV42406	KLV42406	KLV42408	KLV42408	KLV42410	KLV42410	KLV42412
Seals Kit	KGBV6002	KGBV6003	KGBV6004	KGBV6005	KGBV6006	KGBV6007	KGBV6008	KGBV6009	KGBV6010	KGBV6011	KGBV6012

* = 40 threaded ends (DN 65- DN 100 threaded ends only)

* = 75 socket welding

* = 77 butt welding



MATERIALS

1) Shaft	AISI 316	14.401	UNI X5CrNiMo 17 12
2) Nut	AISI 304	14.301	UNI X5CrNi 18 10
3) Belleville washer	AISI 301	14.310	UNI X12CrNi 17 07
4) Gland	AISI 304	14.301	UNI X5CrNi 18 10
5*) V-ring stem packing	P.T.F.E.		

6*) O-ring	FKM		
7) Anti-static device	AISI 316	14.401	UNI X5CrNiMo 17 12
8*) Pyramidal stem seal	P.T.F.E.		
9*) Body gasket	P.T.F.E.		
10*) Seal	P.T.F.E.		
11) Nut	AISI 304	14.301	UNI X5CrNi 18 10
12) Bolt	AISI 304	14.301	UNI X5CrNi 18 10
13) Ball	AISI 316	14.401	UNI X5CrNiMo 17 12
14) Body	AISI 316	14.408	
15) End cap	AISI 316	14.408	

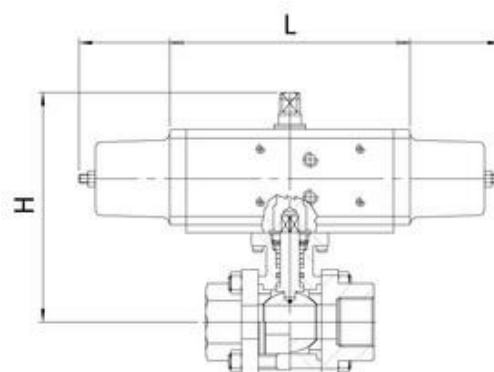
* Components of spare part kit KGBV60...

DIMENSIONS

Size	A	B	øC	D	øE	F	G	□H	øL	øM	øN	P	øQ	øR	S	T	øU	V	Z
DN 8 - 1/4"	65	32,5	1/4"	48,8	11,5	42	49	9	6	6	36-42	10	14.8	14.3	70	65	7.7	150	78,5
DN 10 - 3/8"	65	32,5	3/8"	48,8	12,7	42	49	9	6	6	36-42	10	18.5	17.7	70	65	10.8	150	78,5
DN 15 - 1/2"	75	37,5	1/2"	48,8	15	42	49	9	6	6	36-42	10	21	22	75	75	13.8	150	78,5
DN 20 - 3/4"	80	40	3/4"	50,3	20	45	53	9	6	6	36-42	13	28.3	27.4	90	80	18.9	150	82,5
DN 25 - 1"	90	45	1"	64	25	52	61	9	7	6	42-50	13	35.5	34.3	100	90	24.3	200	88,5
DN 32 - 1"1/4	110	55	1 1/4"	73,4	32	57	66	9	7	6	42-50	13	43.7	43	110	110	32.5	200	93,5
DN 40 - 1"1/2	120	60	1 1/2"	82	38	68	79	11	9	7	50-70	13	49.6	49	125	120	38.1	250	106,5
DN 50 - 2"	140	70	2"	94,3	50	77	88	11	9	7	50-70	16	63	61.4	150	140	49.2	250	115,5
DN 65 - 2"1/2	185	92,5	2 1/2"	165	65	100	114	14	11	9	70-102	16	77.5	77.2	190	185	59	300	141,5
DN 80 - 3"	205	102,5	3"	190	80	111	128	17	11	9	70-102	21	90.7	90	220	205	73.7	300	155,5
DN 100 - 4"	240	120	4"	240	97	138	160	22	13		102-125	24	115.4	115.4	270	240	97.1	400	183,5



Drives - Double acting pneumatic actuator



Model	Actuator	Mounting kit	DN mm	"	L mm	H mm	Weight kg	Model ATEX
D424H* 2	DA015401S	KCF032452	8	1/8"	114	117	1,3	D424H* 2YX
D424H* 3	DA015401S	KCF032452	10	3/8"	114	117	1,3	D424H* 3YX
D424H* 4	DA015401S	KCF032452	13	1/2"	114	117	1,4	D424H* 4YX
D424H* 5	DA015401S	KCF032452	20	3/4"	114	120	1,5	D424H* 5YX
D424H* 6	DA030401S	KCF032453	25	1"	130	134	2,5	D424H* 6YX
D424H* 7	DA030401S	KCF032453	32	1"1/4	130	139	2,9	D424H* YX7
D424H* 8	DA045402S	KCF032453	40	1"1/2	144	156	4,3	D424H* 8YX
D424H* 9	DA060402S	KCF032453	50	2"	152	169	5,7	D424H* 9YX
D424H410	DA120401S	KCF052775	65	2" 1/2	184	218	12,5	D424H410YX
D424H411	DA180401S	KCF072801	80	3"	212	250	17,5	D424H411YX
D424H412	DA360401S	KCF102726	100	4"	242	292	28	D424H412YX

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

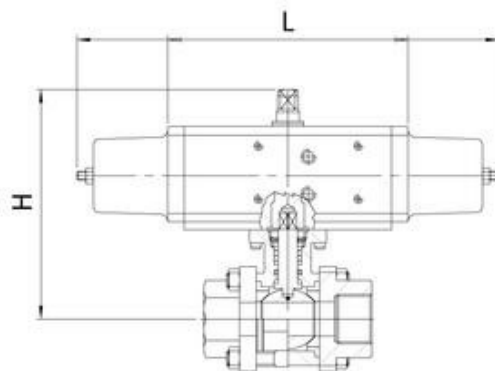
*= 40 threaded ends (DN 65 - DN 100 threaded ends only)

*= 75 socket welding (Model D424H75_)

*= 77 butt welding (Model D424H77_)



Drives - Spring return pneumatic actuator



Article	Actuator	Mounting Kit	DN mm	"	L mm	H mm	Weight Kg	Model Atex
S424H*2	SR015401S	KCF032452	8	1/4"	221	124	1,8	S424H*2YX
S424H*3	SR015401S	KCF032452	10	3/8"	221	124	1,8	S424H*3YX
S424H*4	SR015401S	KCF032452	15	1/2"	221	124	1,9	S424H*4YX
S424H*5	SR015401S	KCF032452	20	3/4"	221	127	2	S424H*5YX
S424H*6	SR030402S	KCF042454	25	1"	240	144	3,2	S424H*6YX
S424H*7	SR030402S	KCF042454	32	1"1/4"	240	150	3,6	S424H*7YX
S424H*8	SR045401S	KCF052456	40	1"1/2"	294	169	5,4	S424H*8YX
S424H*9	SR060401S	KCF052456	50	2"	320	197	7,4	S424H*9YX
S424H410	SR120401S	KCF073288	65	2"1/2"	372	238	16,5	S424H410YX
S424H411	SR240401S	KCF102734	80	3"	436	274	23,5	S424H411YX
S424H412	SR360401S	KCF122737	100	4"	460	322	34	S424H412YX

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

*= 40 threaded ends (DN 65 - DN 100 threaded ends only)

*= 75 socket welding (Model S424H75_)

*= 77 butt welding (Model S424H77_)

