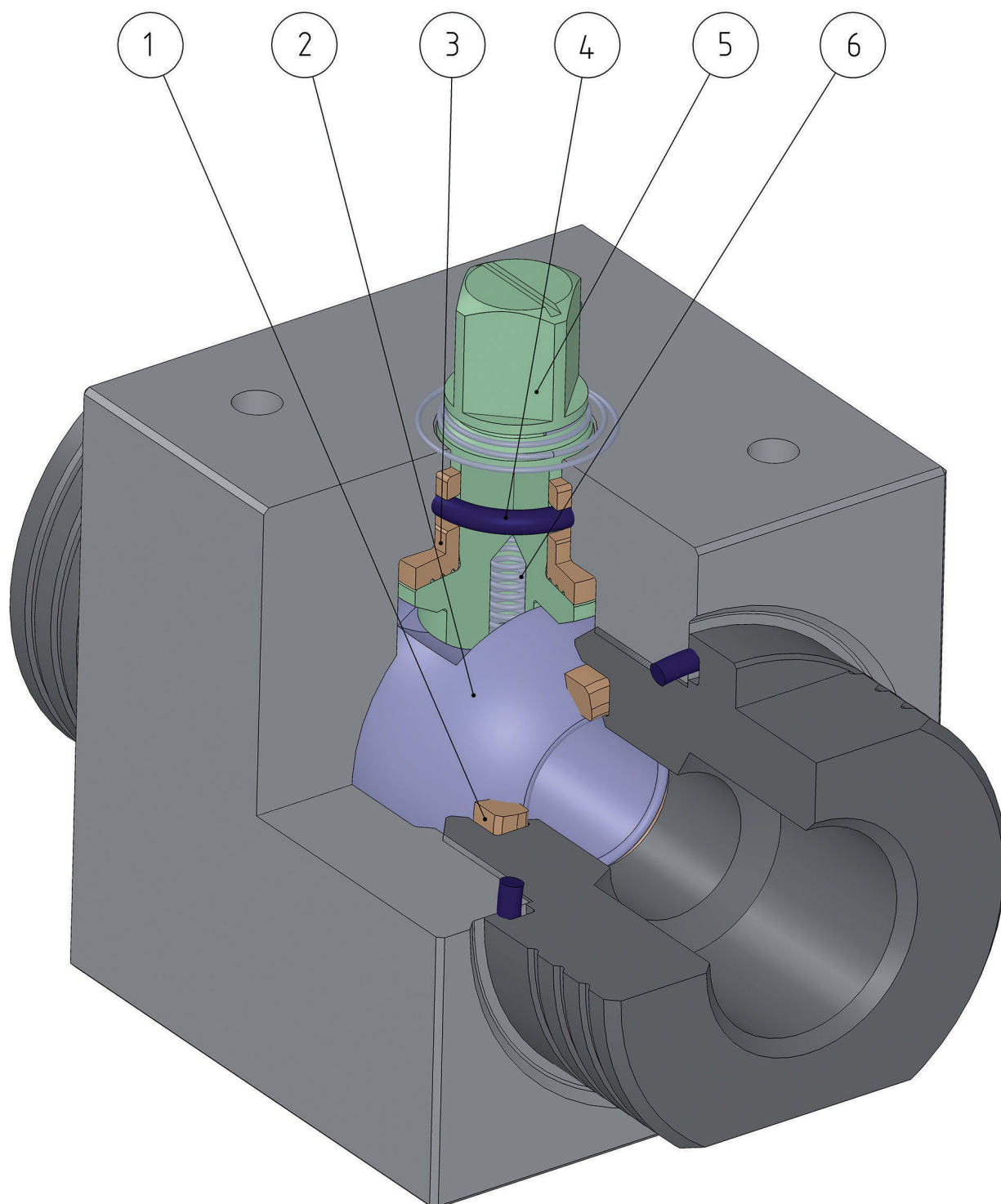




HERCULES

VALVE FOR HIGH CICLICITY NON SELF-LUBRICATING MEDIA





FEATURES & BENEFITS

1	Seat in "LUBROSEAT"	Acetal resin compound containing self-lubricating additives.
		Ideal for non-lubricating fluids.
		High resistance to stress.
2	Stainless steel ball, coated with 40µm Hard Chrome	Longer seal life due to the low wear of the ball.
3	"POWERAMMIDE"* stem bush	It grants a perfect alignment of the shaft on the body and prevents oscillations with high pressure.
		No seizing.
		High number of cycles.
4	Elastomer O-Ring with a hardness of 90 Shore A	No deterioration with quick operations.
4	Low-permeability O-ring "Rapid Gas Decompression"	Good resistance to explosive decompression.
5	Stem in 17-4 PH H900	Increased mechanical strenght about 5 times more compared to a standard AISI316.
5	Shaft rolling	Less wear of the seals due to the low roughness (0,4 micron Ra) which facilitate the sliding of the shaft.
6	Antistatic device (electrical continuity between ball, stem and body)	Static electricity is avoided which can cause sparks and fire in an inflammable/ explosive environment.
		Contact safety throughout the entire life of the valve.
	PED Certificate	Full compliance with European safety standards for pressure equipment (for DN ≥ 32).
	Fire safe design	Guarantees the tightness of the valve also in case of fire.
	Atex Certificate	Installation is possible in a potential explosive environment.



HERCULES - *High Ciclicity*

Non Self-Lubricating Media

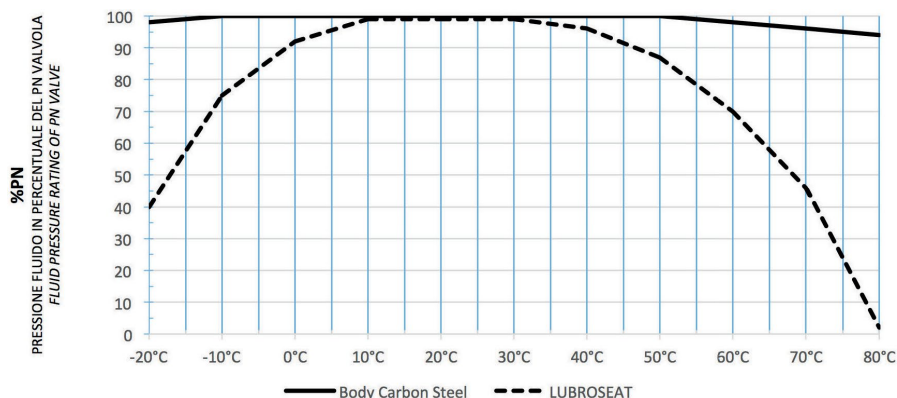
Carbon Steel



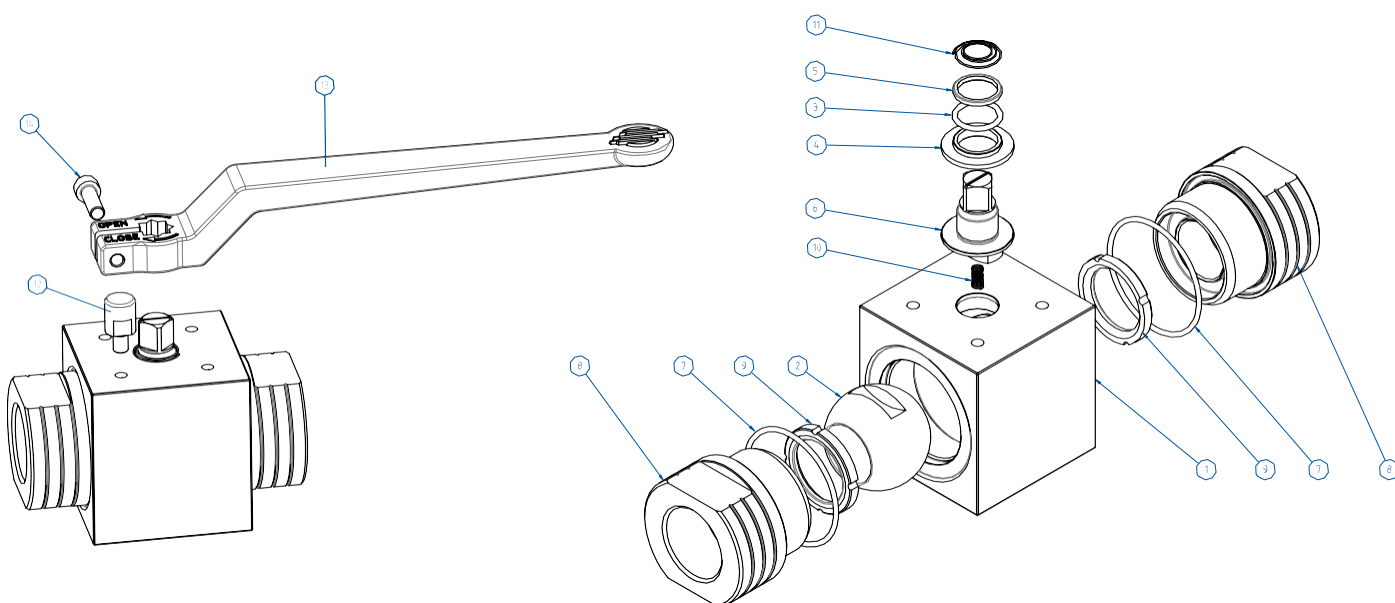
	GENERAL FEATURES: Ends: Threaded ends EN ISO 228 or NPT. Working temperature: from -20°C to +80°C. Working pressure: PN400/6000 psi DN10, DN15, DN20; PN320/4500 psi DN25, DN32, DN40, DN50 Working media: oils, petroleum and petrochemical products, water and other compatible with the constituent materials. Antistatic device. Fire safe design.
	SPECIAL EXECUTION ON REQUEST: For other applications, please contact our technical department.
	CERTIFICATIONS: ATEX version in conformity with directive 2014/34/EU ATEX certificate on request Safety integrity level up SIL3 according to the IEC 61508 PED CE1115 version for size ≥DN32



Pressure/temperature diagram



DN10, DN15, DN20	PN400/6000 psi
DN25, DN32, DN40, DN50	PN320/4500 psi



MATERIALS

1	Body	≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) - Zinc coated
2	Ball	A217 CA15 + Hard chromium plated
3*	O-ring	NBR (FKM on request)
4*	Lower bush	Blend of polymers and aramid filler
5*	Upper bush	Blend of polymers and aramid filler
6	Stem	A564 Tp 630 (17-4 PH)
7*	O-ring	NBR (FKM on request)
8	Ends	≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) - Zinc coated
9*	Seats	LUBROSEAT: Acetal resin with self-lubricating additives.
10	Antistatic device spring	1.4310 - X12CrNi17-7
11	Upper antistatic device spring	1.4310 - X12CrNi17-7
12**	Holder screw	X5CrNiMo1713 - AISI316
13**	Lever	EN AB 46100 - AL SI 11 CU (FE) - Painted
14**	Screw	A2 - 70

* Seals kit components

** kit components

BREAKAWAY TORQUES Nm

PN \ 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 400 bar	20	31	40				
PN 320 bar	15	25	34	62	82	125	166
PN 100 bar	10	20	30	39	64	88	126

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

FLOW RATE KV m³/h

KV m ³ /h	11	20	60	100	130	170	280
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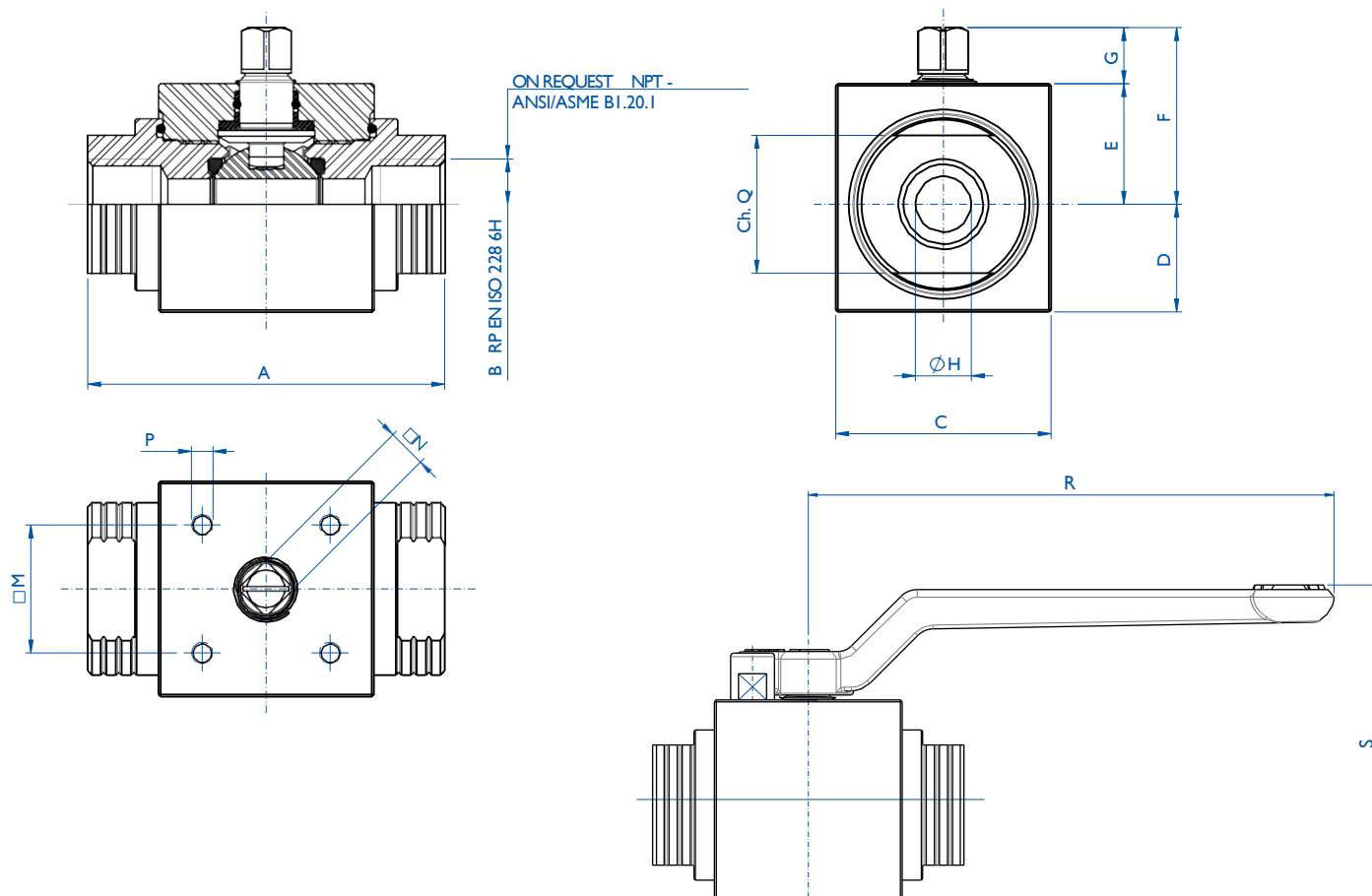
Kv is the coefficient, expressed in m³/h (with water at 15°C) causing a pressure loss of 1 bar.

**HERCULES - HIGH CICLICITY - NON SELF-LUBRICATING MEDIA****CARBON STEEL****FREE SHAFT AND WITH LEVER**

		FREE SHAFT		WITH LEVER			Kg	Seals Kit
SIZE		Free shaft - ISO228	Free shaft - NPT	With lever - ISO228	With lever - NPT	Lever kit		
DN [mm]	[inch]							
DN 10	3/8"	VHA5BABAP03	VHA5BABAP43	LHA5BABAP03	LHA5BABAP43	KLVVH503	0,76	KGBVHPV03P
DN 15	1/2"	VHA5BABAP04	VHA5BABAP44	LHA5BABAP04	LHA5BABAP44	KLVVH503	1,10	KGBVHPV04P
DN 20	3/4"	VHA5BABAP05	VHA5BABAP45	LHA5BABAP05	LHA5BABAP45	KLVVH505	1,46	KGBVHPV05P
DN 25	1"	VHA5BABAP06	VHA5BABAP46	LHA5BABAP06	LHA5BABAP46	KLVVH505	2,30	KGBVHPV06P
DN 32	1" 1/4	VHA6BABAP07	VHA6BABAP47	LHA6BABAP07	LHA6BABAP47	KLVVH507	3,30	KGBVHPV07P
DN 40	1" 1/2	VHA6BABAP08	VHA6BABAP48	LHA6BABAP08	LHA6BABAP48	KLVVH507	5,14	KGBVHPV08P
DN 50	2"	VHA6BABAP09	VHA6BABAP49	LHA6BABAP09	LHA6BABAP49	KLVVH509	9,90	KGBVHPV09P

A = Standard line with NBR O-ring.

Y = With FKM O-ring on request.

**DIMENSIONS**

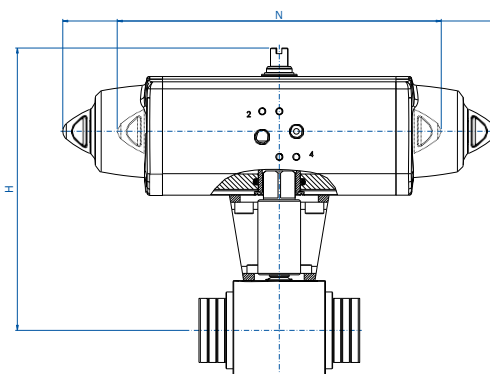
SIZE		A	B	C	D	E	F	G	ØH	Ch.Q	□M	□N	P	R	S
DN [mm]	[inch]														
DN 6	1/8"	69	1/8"	30	13	17	27	10	6	19	21x30	6	M5	103,5	56,1
DN 8	1/4"	69	1/4"	30	13	17	27	10	6	19	21x30	6	M5	103,5	56,1
DN 10	3/8"	72	3/8"	45	19,7	25,3	38,3	13	9	24	29,7 (F04)	9	M5	140	75,5
DN 15	1/2"	83	1/2"	50	25	28	41	13	13	32	29,7 (F04)	9	M5	140	83,6
DN 20	3/4"	95	3/4"	55	27,5	31	46	15	19	37	35,36 (F05)	11	M6	212	94,8
DN 25	1"	113	1"	65	32,5	35	50	15	25	45	35,36 (F05)	11	M6	212	103,8
DN 32	1" 1/4	111	1" 1/4	80	38	42	62	20	32	55	49,5 (F07)	14	M8	315	121,6
DN 40	1" 1/2	130	1" 1/2	90	44	46	66	20	38	65	49,5 (F07)	14	M8	315	131,6
DN 50	2"	140	2"	120	59	61	81	20	51	80	49,5 (F07)	17	M8	315	161,7



HERCULES - HIGH CICLICITY - ☐NON SELF☐LUBRICATING MEDIA

CARBON STEEL

WITH ACTUATOR



HERCULES

WITH DOUBLE ACTING PNEUMATIC ACTUATOR

SIZE		ITEM CODE - EN ISO 228 version	ITEM CODE - NPT version	ACTUATOR	Mounting KIT	N [mm]	H [mm]	Kg
DN [mm]	[inch]							
DN 10	3/8"	DHA5BABAP03AFCA0	DHA5BABAP43AFCA0	DAN0030411S	KCNBCDD5403	174,2	164,5	2,4
DN 15	1/2"	DHA5BABAP04AFDA0	DHA5BABAP44AFDA0	DAN0045412S	KCNBCDD5403	188,5	175,5	2,9
DN 20	3/4"	DHA5BABAP05AFEAO	DHA5BABAP45AFEAO	DAN0060412S	KCNCCDD5405	198,0	185,4	3,8
DN 25	1"	DHA5BABAP06AFGA0	DHA5BABAP46AFGA0	DAN0106411S	KCNCCDD5409	237,0	205,3	5,6
DN 32	1" 1/4	DHA6BABAP07AFHA0	DHA6BABAP47AFHA0	DAN0120411S	KCNDDDD5406	244,1	213,0	6,9
DN 40	1" 1/2	DHA6BABAP08AFIA0	DHA6BABAP48AFIA0	DAN0180411S	KCNDDDD5410	289,9	258,5	10,9
DN 50	2"	DHA6BABAP09AFJA0	DHA6BABAP49AFJA0	DAN0240411S	KCNDDDD5407	313,6	262,1	16,6

A = Standard line with NBR O-ring.

Y= With FKM O-ring on request.

WITH SPRING RETURN PNEUMATIC ACTUATOR

SIZE		ITEM CODE - EN ISO 228 version	ITEM CODE - NPT version	ACTUATOR	Mounting KIT	N [mm]	H [mm]	Kg
DN [mm]	[inch]							
DN 10	3/8"	SHA5BABAP03AFEAO	SHA5BABAP43AFEAO	SRN0030402S	KCNBCDD5408	258,8	175,7	3,4
DN 15	1/2"	SHA5BABAP04AFGA0	SHA5BABAP44AFGA0	SRN0053401S	KCNBCDD5411	304,2	191,3	4,9
DN 20	3/4"	SHA5BABAP05AFHA0	SHA5BABAP45AFHA0	SRN0060401S	KCNCCDD5409	338,5	198,0	5,6
DN 25	1"	SHA5BABAP06AFIA0	SHA5BABAP46AFIA0	SRN0090401S	KCNCCDD5412	393,7	232,5	9,2
DN 32	1" 1/4	SHA6BABAP07AFJA0	SHA6BABAP47AFJA0	SRN0120401S	KCNDDDD5410	409,6	243,1	11,2
DN 40	1" 1/2	SHA6BABAP08AFKA0	SHA6BABAP48AFKA0	SRN0180401S	KCNDDDD5410	474,0	254,0	15,2
DN 50	2"	SHA6BABAP09AFLA0	SHA6BABAP49AFLA0	SRN0240401S	KCNDEDD5413	520,5	306,0	23,6

A = Standard line with NBR O-ring.

Y= FKM O-ring on request.

Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.

Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution)



Pimatic Oy | Klaavolantie 1, 32700 Huittinen, Finland

Tel. +358 (0)20 770 9501 | info@pimatic.fiwww.pimatic.fi