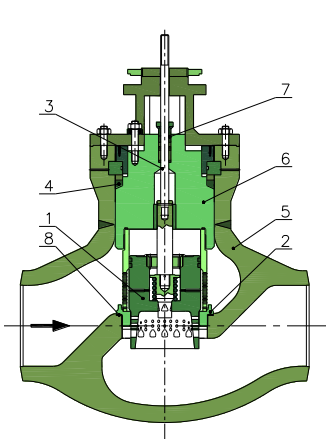
HCVS2 CONTROL VALVE TECHNICAL BRIEF

	Client:	Quotation No:	Valve desc:	KKS:	Valve speciffication:



Specialized High Trim Control Valves **HCVS** are dedicated to operate under extremely tough conditions PN250÷600, T(-50÷600°C). The construction is based on cored forged shape body, which is unique. A wide variety of different trim designs makes the valves able to cope with heavy cavitation, flashing, chocked flow and noise excessive conditions. This particular construction **HCVS2** is applicable as boiler start-up water valve, feeding water valve also as steam start-up or dump valve or high and medium pressure reduction valve.

The valve works with FTC direction. When the stem starts opening, pilot-piston moves first so that low flow is precisely controlled and simultaneously main plug balancing starts acting.

Benefits:

Interchangeable trim designs of vide variety
Rangeability 1:200 (important when start-up function)
High leakage class despite balancing
Self-seal bonnet construction
Any soft seals inside the body
Easy maintenance
Butt weld ends / flange connection matching the pipe size
All actuator systems are adaptable

Alternative solutions: Economic- **MCV**-P

Rangeability:	1:200
Plug 100% open- main aver. coefficients	FL=0,9; XT=0,78; Fd=0,1; xFz=0,75

Kvs	Stroke	Seat diam.	DN min	DN max
0,1	20	-	15	50
0,16	20	-	15	50
0,25	20	-	15	50
0,4	20	-	15	50
0,63	20	-	15	50
1	20	9	15	50
1,6	20	14	15	50
2,5	20	14	15	50
4	20	19	15	50
6,3	20	19	20	50
10	20	25	25	50
16	20	34	32	65
25	20	44	40	80
40	20	50	50	100
63	40	70	65	150
94	40	90	80	200
125	40	100	100	250
160	40	110	125	250
250	50	125	150	250
320	50	160	150	250
500	63	194	200	300
630	63	194	200	300
800	100	240	250	300
1000	100	240	300	300
1300	100	270	300	300

Part No	Part Name	Speciffication. position	Symbol	Material/performance	Part No	Part Name	Speciffication. position	Symbol	Material/performance
1	Plug	**X1** Performance			5	Body	**X8** Performance	1	DIN/PN Flanged
			P	Perforated				2	ANSI Flanged
		X2 Ballancing						3	BW Standard
			B	Ballanced				4	BW Specified
		X3 Material	1	1.4571			**X9** Material	1	1.0460
			2	1.4571+stellite				3	1.5415
			3	1.4571+nitrogen				4	1.7335
			4	1.4057 hard. 35 HRC				7	1.4541
			5	1.4125 hard. 55 HRC				8	1.4404
			6	Other				11	1.7380
		X4 Characteristic	L	Linear				12	1.7715
			P	Equal-percentage				13	1.4903 (P91)
			M	Modified				14	1.4901 (P92)
			S	Other				33	Other
2	Seat	**X5** Material	1	1.4571					
			2	1.4541+Stellite	6	Bonnet	**X10** Performance	1	Standard
								2	Spring strained
								3	TA-LUFT
			5	Other				4	Bellows
-	-	**X6** Leakage class EN-60534-4	1	IV Standard	7	Packing	**X11** Material/ Performance	1	PTFE
			2	V Enhanced				2	PTFE V
								3	PTFE Oxygen
-	-	**X7** Flow Direction						4	Graphite Brained
			FC	Flow to Close				5	Graphite Expanded
3	Stem		1.4571, 1.4057 Hardenned 35 HRC		8	Seat Gasket		1.4404+Graphite Spiral	
4	Body Gasket		1.4404+Graphite Trapeze		9	Guide Bushing-		14571+Nitrogen	

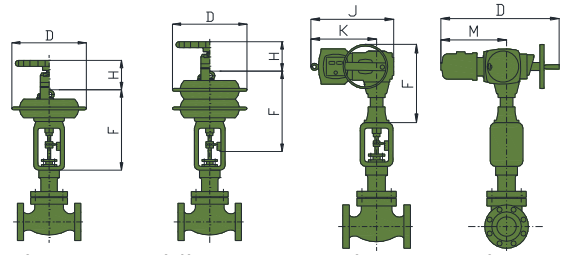
VALVE SPECIFFICATION

Full specification of the valve consists of:
HCVS2 – symbol
-X1-…-X11- symbols from the table on left
PN, DN, Kvs
Medium
Design medium parameters
Shut-off pressure
Example:
HCVS2-P-B-5-M-2-2-FC-4-1-2-5, DN100, PN250, Kvs125.
Medium Water, Td=200°C, Pd=160bar
Shut-off pressure=20bar

It is also recommended to specify working parameters as working pressure, temperature, pressure drop, flow and additional remarks if needed.

CAUTION:

The client is not obligated to specify the valve when order. You can simply describe your expectations and INTEC sales person will specify adequate valve for you.



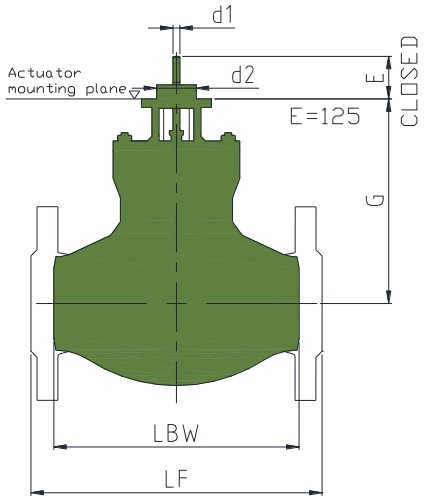
single pneumatic | double pneumatic | electric | electric

PNEUMATIC	Stroke	F	H	D	-	-	Mass
250					-	-	
400	25	385	175	305	-	-	20
2x400	25	500	175	305	-	-	40
630	40	485	315	375	-	-	40
2x630	40	715	315	375	-	-	55
1000	60	650	300	480	-	-	70
2x1000	60	920	300	480	-	-	95
ELECTRIC	Stroke	F	M	D	J	K	Mass
XIRa, XIRSa	50	362	318	586	393	322	25
XIRb, XIRSb	50	401	335	602	422	335	34
XIRc, XIRSc	80	591	449	765	490	374	78
XIRa, XIRSa	100	412	318	586	393	322	25
XIRb, XIRSb	100	451	335	602	422	335	34
XIRc, XIRSc	160	671	449	765	490	374	85

Other actuators adaptable. For example AUMA actuators have closely similar dimensions and the same mechanical connections.

PN/DN	Dim.	15	20	25	32	40	50	65	80	100	125	150	200	250	300
250	LF	230	260	260	300	300	350	400	450	520	600	700	800	900	1050
	LBW	160	160	160	300	300	300	340	380	430	500	550	650	775	900
	G	200	200	200	211	222	225	255	285	302	402	575	625	678	728
	GM*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d1	M12x1,25						M16x1,5				M20x1,5		M24x1,5	
	d2	Ø57,15									Ø84,15		Ø95,25		
	Mass	15	15	15	19	25	36	48	57	97	144	202	315	492	708
320	LF	230	260	260	300	300	350	400	450	520	600	700	800	900	1050
	LBW	160	160	160	300	300	300	340	380	430	500	550	650	775	900
	G	200	200	200	211	222	225	255	285	302	402	575	625	678	728
	GM*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d1	M12x1,25						M16x1,5				M20x1,5		M24x1,5	
	d2	Ø57,15									Ø84,15		Ø95,25		
	Mass	15	15	15	19	25	36	48	57	97	144	202	315	492	708
400	LF	264	273	308	349	384	451	508	578	673	794	914	1022	1270	1422
	LBW	160	160	160	300	300	300	340	380	430	500	550	650	775	900
	G	200	200	200	211	222	225	255	285	302	402	575	625	678	728
	GM*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d1	M12x1,25						M16x1,5				M20x1,5		M24x1,5	
	d2	Ø57,15									Ø84,15		Ø95,25		
	Mass	15	15	15	19	25	36	48	57	97	144	202	315	492	708
600	LF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LBW	160	160	160	300	300	300	340	380	430	500	550	650	775	900
	G	200	200	200	211	222	225	255	285	302	402	575	625	678	728
	GM*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d1	M12x1,25						M16x1,5				M20x1,5		M24x1,5	
	d2	Ø57,15									Ø84,15		Ø95,25		
	Mass	15	15	15	19	25	36	48	57	97	144	202	315	492	708

GM* - The height measured with bellows or TA-LUFT bonnet. Masses are given for the valves with standard bonnet and BW ends.



Zakład Automatyki Przemysłowej INTEC Sp. z o.o.
Bacciarellego 54; 51-649 Wrocław
tel./fax +48 71 3481818
e-mail: biuro@intec.com.pl
http: www.intec.com.pl

Fabryka Armatury Przemysłowej WAKMET sp. j.
Bodzanów 75, 48-340 Głuchołazy 1
tel./fax +48 77 4394020
e-mail: wakmet@wakmet.com.pl
http: www.wakmet.com.pl