



PRCV-STH2L

PIPELINE ROTARY CONTROL VALVES



Size Range	4 in to 30 in
Max Noise Attenuation	13 dBA
Relative Capacity	Very High Capacity
Max Range-Ability	200:1
Shutoff	Class IV

Design Standard	API-6D ^{5,7} ASME 16.34 ⁸ , API 6FA ⁸
Face-Face Dimensions	API-6D
Flange Dimensions	ASME B16.5
PED / ATEX / CE	Optional ⁸
ANSI Range	150 – 1500 ANSI
End Connections	RFFE, Weld, RTJ, Combo
Trim Type	Stealth Trim, Level 2
Performance Trim Technology	Upstream Variable Diffuser Downstream Variable Diffuser Downstream Ball Diffuser
Max Control ΔP	1000 psid
Max Shutoff ΔP	FULL ANSI ΔP
Compatible Buried Applications	YES
Flow Profile Curve	Exponential
Min Control Cv	0.50% Max Cv
Max Control Cv	85% Max Cv
Seats	1X Upstream Soft Seats Std Double Piston Effect ^{5,7,8} Metal Seats Optional ⁸
Compatible Actuators	VRG RHPA-DA VRG RHPA-SR Electric Actuators Electro-Hydraulic Actuators Other Manufacturers

Base Platform	55 / B5 / PR / WR / VP
Control Valve Specs	Per VRG PRCV Specifications

MATERIALS OF CONSTRUCTION	
Seat Seal	VITON O-Ring Insert ^{4,5,7} DELTRIN Molded Profiled Insert ⁸ Optional SS ⁸
Seat Injection	Upstream/Downstream Buttonhead ^{4,5,7,8}
O-Rings	VITON GLD ^{4,5,7,8}
Firesafe Seals	GRAPHITE ⁸
High Performance Trim	N/A
Final Assembly and Test	USA & ITALY
Country Origin	ITALY ^{4,5,7,8}
Body (Forged)	A350 LF2 ^{4,5,6,7,8}
Stem Ball	AISI 4140 + 1.0 mil ENP ^{4,5,7} A350 LF2 + 1.0 mil ENP ^{4,5,7} ASTM A694-F60 + 3.0 mil ENP ⁸ Optional SS ⁸ PRCV Control Specification
Lubrication	Mobil SHC220 OR Valtex 2000
Stem Seal	VITON O-RINGS ^{4,5,7} PTFE V-PACK ⁸
Stem Injection**	Stem Inject & Opposing Stem Relief ^{4,5,7,8}
Body Drain**	90° From Stem ^{4,5,7,8}
Seat Ring**	A350 LF2 + ENP ^{4,5,7,8} , Optional SS ⁸ VRG Spec Seat Springs ^{4,5,6,8}

- 4 - Applies to Type 55 Platform
- 5 - Applies to Type B5 Platform
- 6 - Applies to Type PR Platform
- 7 - Applies to Type WR Platform
- 8 - Applies to Type VP Platform



MIN OPERATING TEMPERATURE

VP	-50 F STANDARD
T55, PR, WR	-20 F STANDARD
T54, T55, PR, WR	-50 F OPTIONAL

MAX OPERATING TEMPERATURE TEMP DEFINED BY:
ASME B16.34 PRESSURE-TEMPERATURE RATINGS



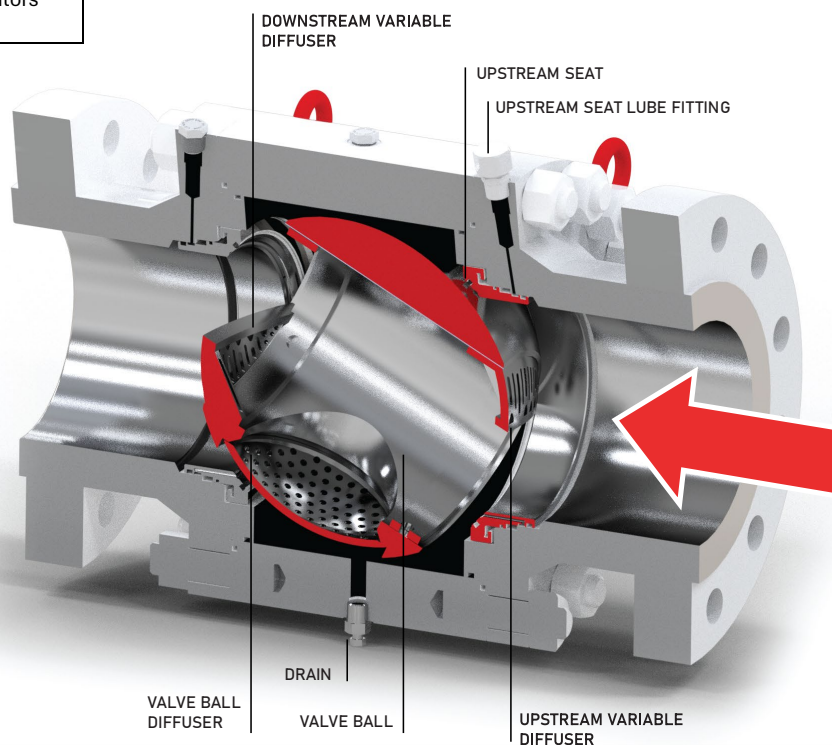
SIZE RANGE
4 in to 30 in



MAX NOISE
ATTENUATION
13 dBA



MAX RANGE-ABILITY
200:1





PRCV-STH2L

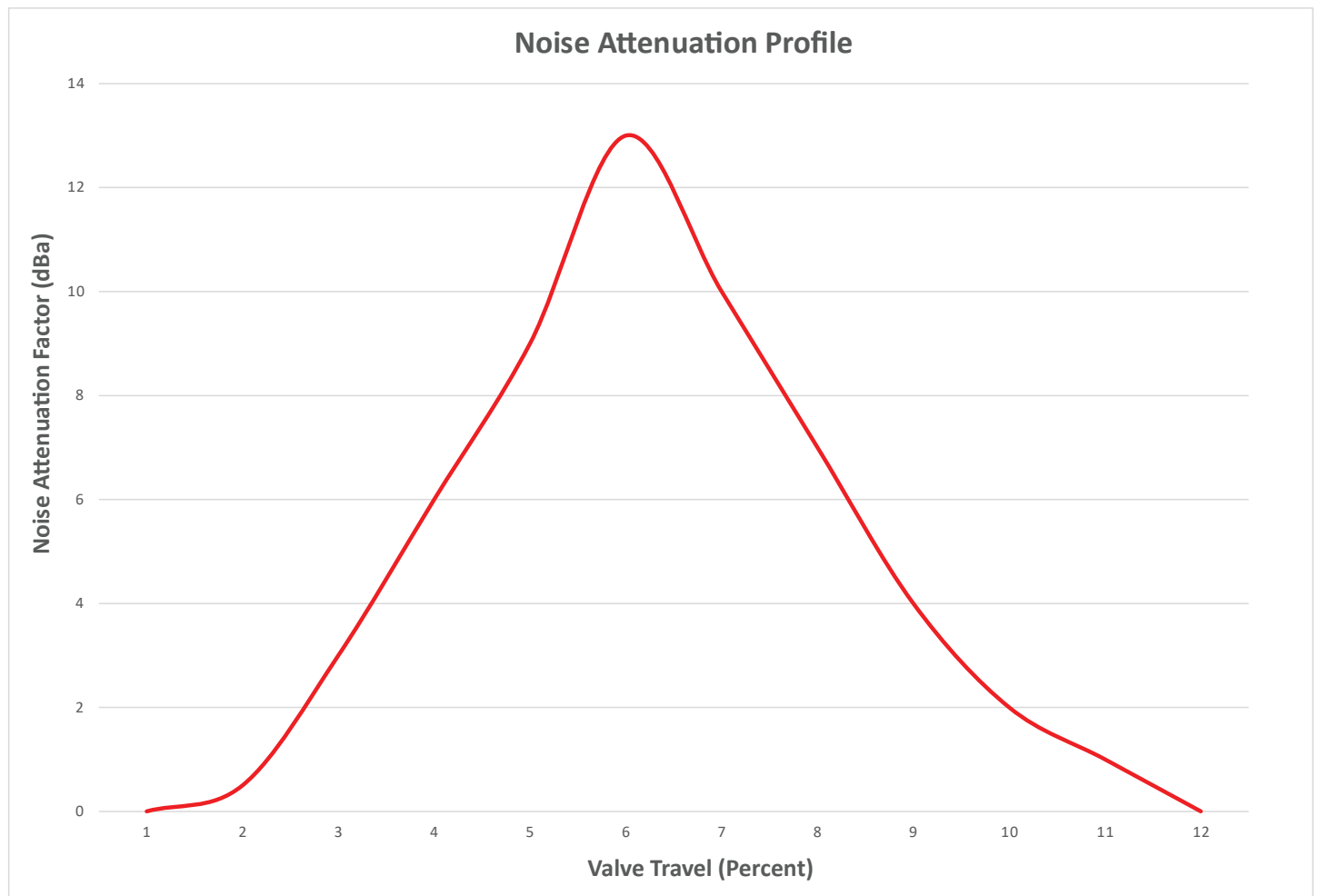
PIPELINE ROTARY CONTROL VALVES



NOISE ATTENUATION (DBA)

Percent Rotation	0	5	10	20	30	40	50	60	70	80	90	100
PRCV-STH2L	0	0.5	3	6	9	13	10	7	4	2	1	0

NOISE ATTENUATION (DBA) VS. ROTATION OF PRCV CONTROL VALVE





PRCV-STH2L

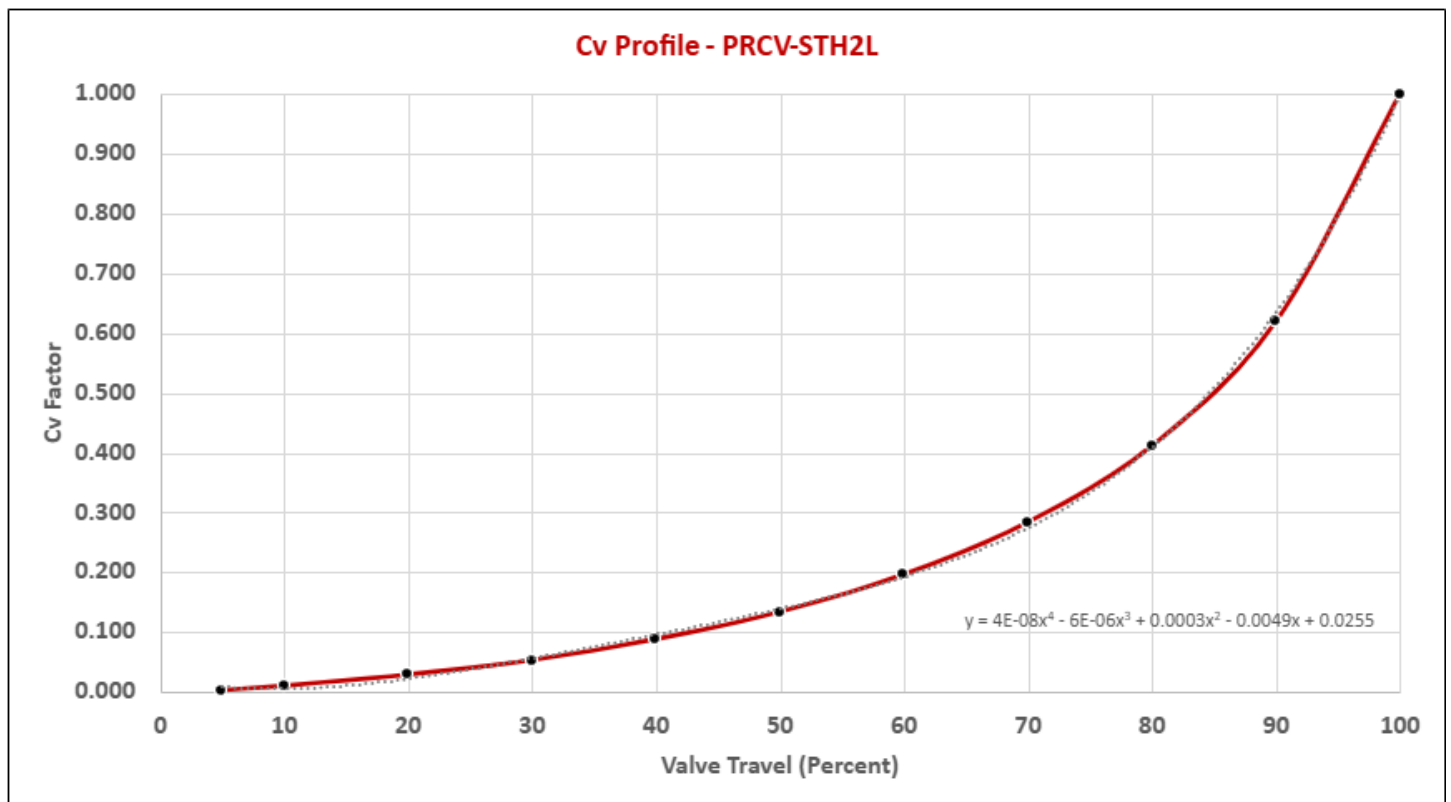
PIPELINE ROTARY CONTROL VALVES



CV PROFILE

PRCV-STH2L	MIN	5	10	20	30	40	50	60	70	80	90	100
Cv Factor	0.003	0.003	0.01	0.029	0.053	0.088	0.134	0.197	0.284	0.412	0.619	1
4	3	3	6	15	28	47	71	104	150	217	326	526
6	7	7	12	34	63	105	159	233	336	488	734	1184
8	12	12	22	61	112	186	282	414	598	867	1304	2105
10	19	19	34	96	175	291	441	647	934	1355	2038	3289
12	27	27	50	138	252	419	635	932	1346	1951	2934	4736
16	48	48	88	245	448	744	1128	1656	2392	3468	5216	8420
20	75	75	138	383	700	1163	1763	2588	3738	5419	8150	13156
24	108	108	198	551	1008	1674	2538	3726	5382	7803	11736	18945
30	148	169	309	861	1575	2616	3966	5822	8409	12192	18338	29602

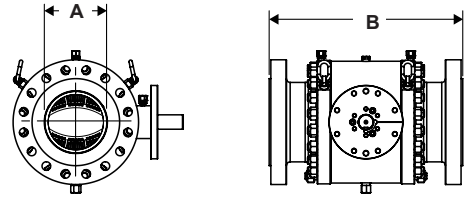
CV PROFILE – PRCV-STH2L





PRCV-STD2L

PIPELINE ROTARY CONTROL VALVES



PRCV-STD2L Series Face to Face Dimensions (RFFE)

A.Size (Bore)		B.150 ANSI		B.300 ANSI		B.600 ANSI		B.900 ANSI		B.1500 ANSI	
In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)
4"	100	9	229	12	305	17	432	18	457	21.5	546
6"	150	15.5	394	15.875	403	22	559	24	610	28	711
8"	200	18	457	19.75	502	26	660	29	737	32.75	832
10"	250	21	533	20.375	518	31	787	33	838	39	991
12"	300	24	610	25.5	648	33	838	38	965	44.5	1130
16"	400	30	762	33	838	39	991	44.5	1130	54.5	1384
20"	500	36	914	39	991	47	1194	52	1321	65.5	1664
24"	600	42	1067	45	1143	55	1397	61	1549	80.5	2045
30"	750	11847	5315	13340	5992	15429	6940	0	0	0	0

PRCV-STD2L Series Standard Weights (RFFE) - QTR PLATFORM

Size (Bore)		150 ANSI		300 ANSI		600 ANSI		900 ANSI		1500 ANSI	
In.	mm	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg
4"	100	142	64	169	77	169	77	361	164	369	170
6"	150	386	175	430	195	541	245	717	325	1028	472
8"	200	677	307	732	332	997	452	1047	475	1475	678
10"	250	851	386	1072	486	1239	562	1947	883	2388	1098
12"	300	1379	626	1403	636	1890	857	2497	1133	3363	1546
16"	400	2042	926	2541	1153	3154	1431	4053	1838	9875	4539
20"	500	3967	1799	4796	2175	5766	2615	6895	3128	18670	8581
24"	600	7688	3487	7490	3397	8574	3889	10978	4980	0	0
30"	750	11847	5315	13340	5992	15429	6940	0	0	0	0

PRCV-STD2L Series Standard Weights (RFFE) - VP PLATFORM

Size (Bore)		150 ANSI		300 ANSI		600 ANSI		900 ANSI		1500 ANSI	
In.	mm	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg
4"	100	153	69	198	90	323	147	373	169	402	182
6"	150	395	179	437	198	613	278	794	360	1069	485
8"	200	639	290	743	337	1034	469	1404	637	1801	817
10"	250	1016	461	1118	507	1581	717	2167	983	3551	1611
12"	300	1510	685	1698	770	2590	1175	3177	1441	5176	2348
16"	400	2613	1185	3219	1460	4235	1921	4994	2265	9899	4490
20"	500	4568	2072	4976	2257	6938	3147	9539	4327	14874	6747
24"	600	6809	3089	8270	3751	12210	5538	15252	6918	25217	11438
30"	750	11826	5306	15737	7080	18915	8521	27537	12432	0	0