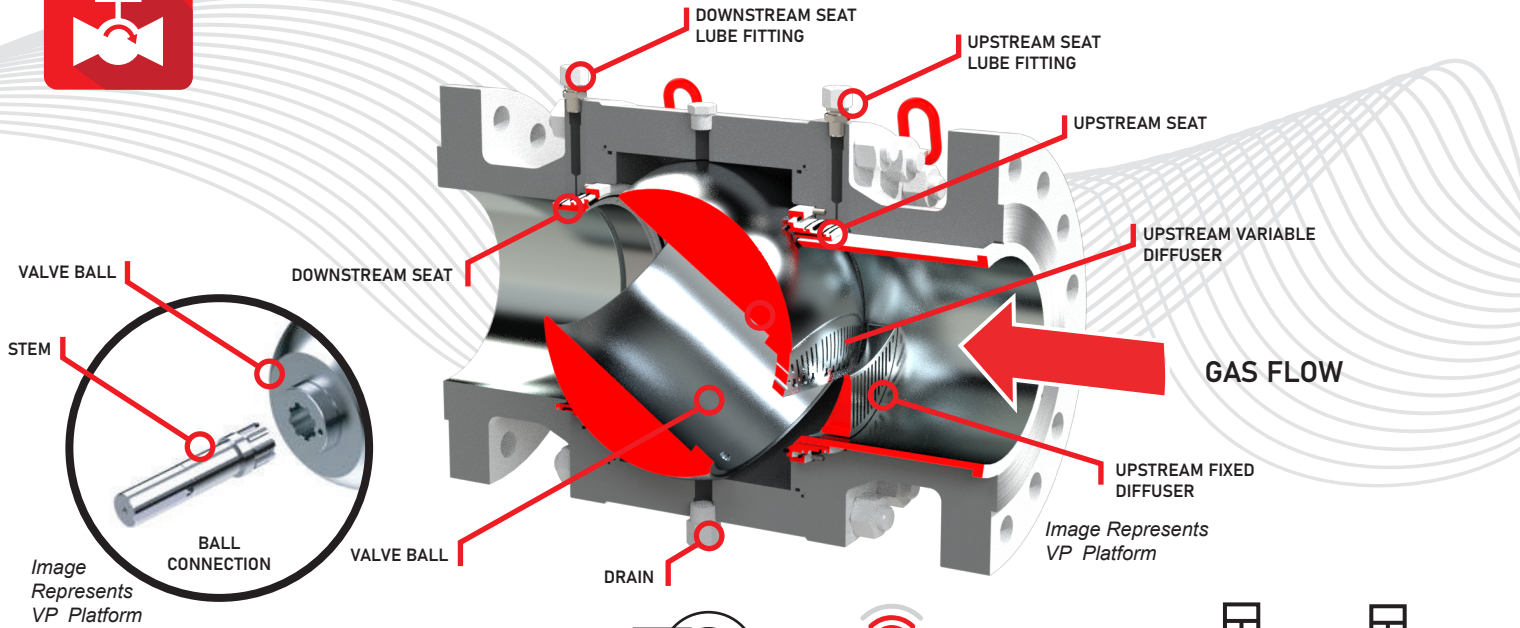
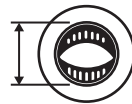




# PIPELINE ROTARY CONTROL VALVES



## PRCV-STH1



SIZE RANGE  
6 in to 36 in



MAX NOISE  
ATTENUATION  
7 dBA



MAX RANGE-ABILITY  
300:1



BELOW  
GROUND



ABOVE  
GROUND

### SPECS AND MATERIALS CONSTRUCTION

Size Range	6 in to 36 in
Max Noise Attenuation	7 dBA
Relative Capacity	Very High Capacity
Max Range-Ability	300:1
Shutoff	Class VI

Design Standard	API-6D <sup>4,5,6,7</sup> ASME 16.34 <sup>8</sup> , API 6FA <sup>8</sup>
Face-Face Dimensions	API-6D
Flange Dimensions	ASME B16.5
PED / ATEX / CE	Optional <sup>8</sup>
ANSI Range	150 – 1500 ANSI
End Connections	RFFE, Weld, RTJ, Combo
Trim Type	Stealth Trim, Level 1
Performance Trim Technology	Upstream Variable Diffuser Upstream Fixed Diffuser
Max Control ΔP	1000 psid
Max Shutoff ΔP	FULL ANSI ΔP
Compatible Buried Applications	YES
Flow Profile Curve	Hyperbolic
Min Control Cv	0.33% Max Cv
Max Control Cv	85% Max Cv
Seats	2X Seats Soft Seats Std Double Piston Effect <sup>4,5,6,7,8</sup> Metal Seats Optional <sup>8</sup>
Compatible Actuators	VRG RHPA-DA VRG RHPA-SR Electric Actuators Electro-Hydraulic Actuators Other Manufacturers

Base Platform	55 / B5 / EB / VP
Control Valve Specs	Per VRG PRCV Specifications
Body (Forged)	A350 LF2 <sup>4,5,6,7,8</sup>
Stem	AISI 4140 + 1.0 mil ENP <sup>4,5,7</sup> 174-PH SS <sup>8</sup>
Ball	A350 LF2 + 1.0 mil ENP <sup>4,5,7</sup> ASTM A694-F60 + 3.0 mil ENP <sup>8</sup> Optional SS <sup>8</sup> PRCV Control Specification
Lubrication	Mobil SHC220 OR Valtex 2000
Stem Seal	VITON O-RINGS <sup>4,5,7</sup> PTFE V-PACK <sup>8</sup>
Stem Injection**	Stem Inject & Opposing Stem Relief <sup>4,5,7,8</sup>
Body Drain**	90° From Stem <sup>4,5,7,8</sup>
Seat Ring**	A350 LF2 + ENP <sup>4,5,7,8</sup> , Optional SS <sup>8</sup> VRG Spec Seat Springs <sup>4,5,6,8</sup>

MATERIALS OF CONSTRUCTION	
Seat Seal	VITON O-Ring Insert <sup>4,5,7</sup> DELFIN Molded Profiled Insert <sup>8</sup> Optional SS <sup>8</sup>
Seat Injection	Upstream/Downstream Buttonhead <sup>4,5,7,8</sup>
O-Rings	VITON GLD <sup>4,5,7,8</sup>
Firesafe Seals	GRAPHITE <sup>8</sup>
High Performance Trim	N/A
Final Assembly and Test	USA & ITALY
Country Origin	ITALY <sup>4,5,7,8</sup>

4 - Applies to Type 55 Platform  
5 - Applies to Type B5 Platform  
7 - Applies to Type EB Platform  
8 - Applies to Type VP Platform

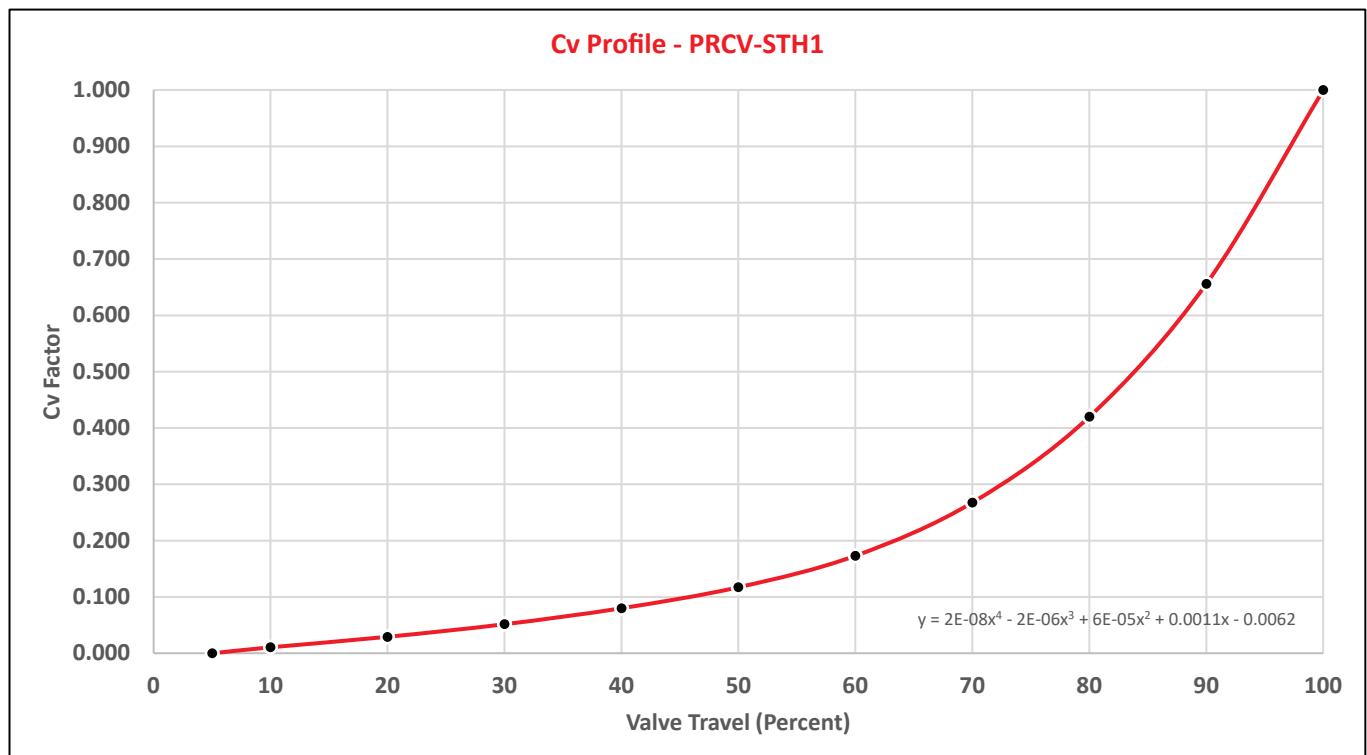


## CV PROFILE

### PERCENT TRAVEL

PRCV-STH1	MIN	5	10	20	30	40	50	60	70	80	90	100
<b>Cv Factor</b>	0.003	0.000	0.011	0.029	0.052	0.080	0.117	0.173	0.268	0.420	0.656	1.000
<b>6</b>	13.98	0	15	41	72	112	164	242	374	587	917	1398
<b>8</b>	7	0	23	63	111	172	252	372	575	902	1409	2148
<b>10</b>	34.68	0	37	102	179	278	407	601	928	1456	2275	3468
<b>12</b>	47.49	0	51	139	245	380	557	822	1271	1994	3115	4749
<b>16</b>	82.22	0	88	241	425	658	965	1424	2201	3453	5393	8222
<b>20</b>	125.95	0	135	369	651	1009	1478	2181	3372	5289	8262	12595
<b>24</b>	181.37	0	194	532	937	1452	2128	3141	4855	7616	11897	18137
<i>Xt</i>	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.82	0.77	0.63	0.40
<i>FI</i>	0.94	0.94	0.94	0.94	0.93	0.92	0.90	0.85	0.79	0.72	0.63	0.53

### Cv PROFILE - PRCV-FP



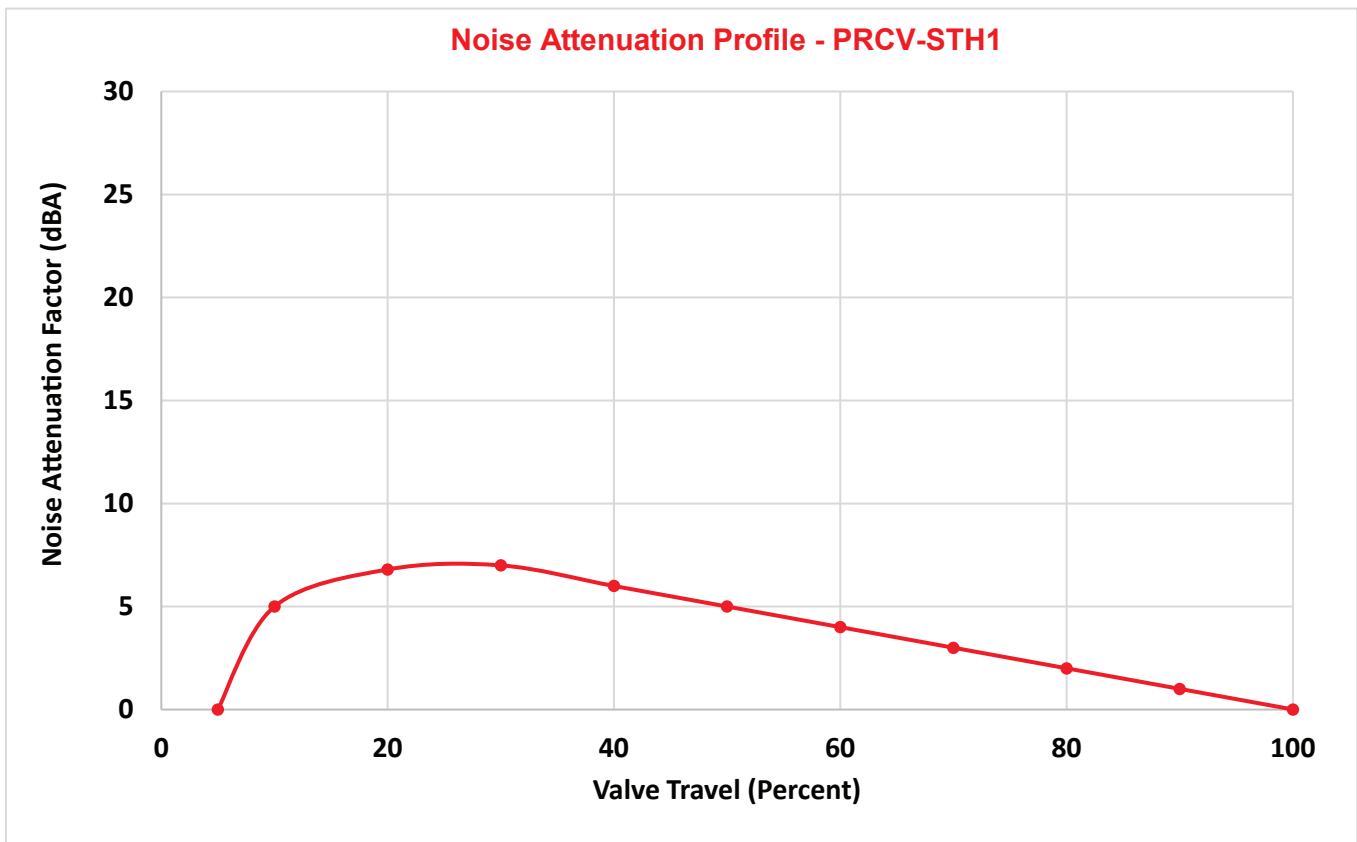


## NOISE ATTENUATION (DBA)

Noise Attenuation (dBA) vs. Rotation of PRCV Control Valve

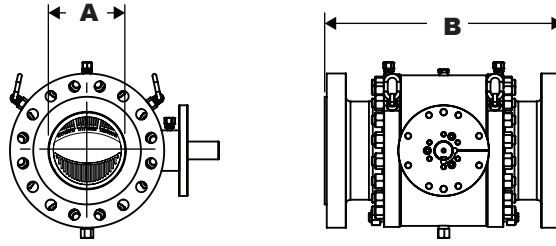
Percent Rotation	0	5	10	20	30	40	50	60	70	80	90	100
PRCV-STH1		0	5	6.8	7	6	5	4	3	2	1	0

Noise Attenuation (dBA) vs. Rotation of PRCV Control Valve





# PRCV-STH1



**PRCV-STH1 Series Face to Face Dimensions (RFFE)**

A Size (Bore)		B 150 ANSI		B 300 ANSI		B 600 ANSI		B 900 ANSI		B 1500 ANSI	
Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)
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

**PRCV-STH1 Series Standard Weights (RFFE) - 55, B5, EB PLATFORMS**

Size (Bore)		150 ANSI		300 ANSI		600 ANSI		900 ANSI		1500 ANSI	
in	mm	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg
6"	150	397	180	442	200	556	252	737	334	1057	479
8"	200	703	319	760	344	1032	468	1083	491	1523	691
10"	250	895	406	1122	509	1294	587	2022	917	2475	1122
12"	300	1440	653	1465	664	1965	891	2589	1175	3479	1578
16"	400	2144	972	2657	1206	3287	1491	4211	1910	10195	4624
20"	500	4152	1884	5004	2270	6001	2723	7162	3249	19264	8738
24"	600	8155	3699	7951	3607	9065	4112	11536	5233	0	0

**PRCV-STH1 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
6"	150	406	184	449	204	630	286	816	370	1099	498
8"	200	664	301	771	349	1070	485	1450	658	1858	843
10"	250	1065	483	1170	530	1646	746	2248	1020	3670	1665
12"	300	1575	714	1768	802	2685	1218	3288	1491	5343	2424
16"	400	2731	1238	3354	1521	4398	1995	5178	2349	10219	4635
20"	500	4770	2164	5189	2354	7206	3268	9879	4481	15363	6968
24"	600	7251	3289	8753	3970	12802	5807	15929	7225	26171	11871