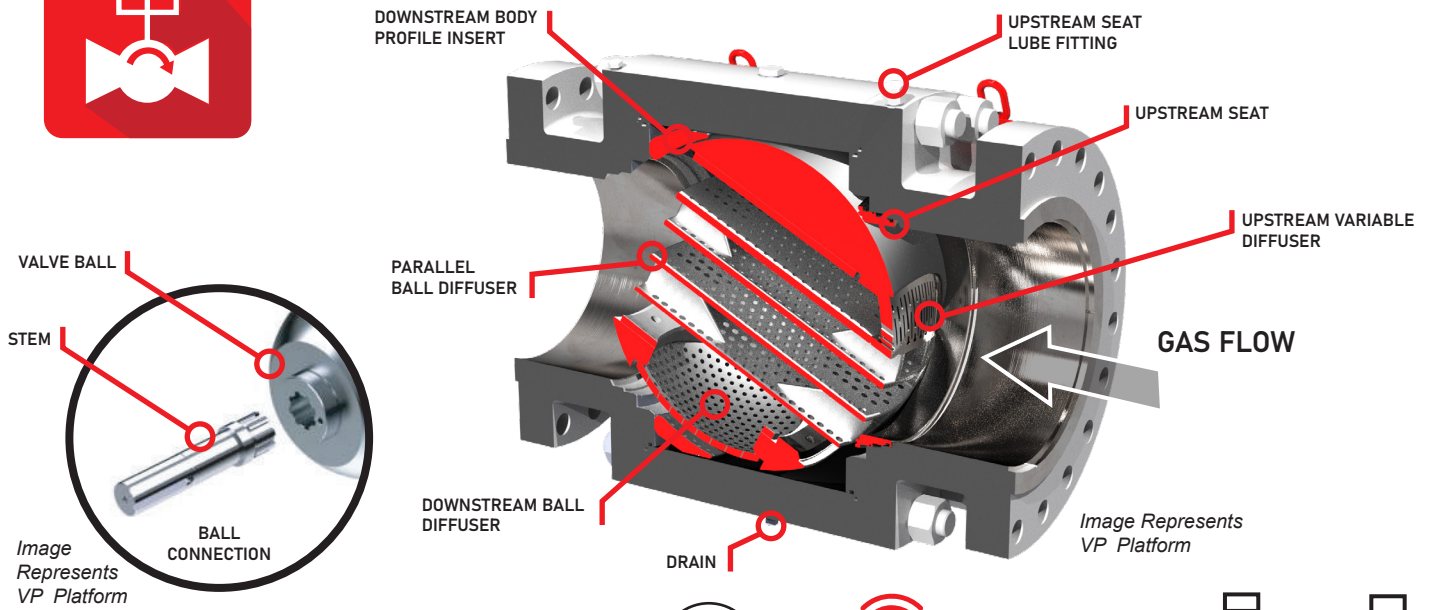


# PIPELINE ROTARY CONTROL VALVES



## PRCV-STH4L



### SPECS AND MATERIALS CONSTRUCTION

<b>Size Range</b>	6 in to 24 in
<b>Max Noise Attenuation</b>	27 dBA
<b>Relative Capacity</b>	High Capacity
<b>Max Range-Ability</b>	300:1
<b>Shutoff</b>	Class V

<b>Design Standard</b>	ASME B16.5 & B16.34, API 6FA / PED Compliant
<b>Face-Face Dimensions</b>	API-6D
<b>Flange Dimensions</b>	ASME B16.5
<b>PED / ATEX / CE</b>	Optional
<b>ANSI Range</b>	150 – 1500 ANSI
<b>End Connections</b>	RFFE, Weld, RTJ, Combo
<b>Trim Type</b>	Stealth Trim, Level 4
<b>Performance Trim Technology</b>	Upstream Variable Diffuser Parallel Ball Diffuser Plates Downstream Ball Diffuser Downstream Body Profile Insert
<b>Max Control ΔP</b>	1440 psid
<b>Max Shutoff ΔP</b>	FULL ANSI ΔP
<b>Compatible Buried Applications</b>	YES
<b>Flow Profile Curve</b>	Exponential
<b>Min Control Cv</b>	0.50% Max Cv
<b>Max Control Cv</b>	85% Max Cv
<b>Seats</b>	1X Upstream Soft Seats Std Double Piston Effect
<b>Compatible Actuators</b>	VRG RHPA-DA VRG RHPA-SR Electric Actuators Electro-Hydraulic Actuators Other Manufacturers

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

MATERIALS OF CONSTRUCTION	
<b>Seat Seal</b>	VITON O-Ring Insert <sup>4,5,7</sup> DELTRIN Molded Profiled Insert <sup>8</sup> Optional SS <sup>8</sup>
<b>Seat Injection</b>	Upstream Buttonhead <sup>4,5,7,8</sup>
<b>O-Rings</b>	VITON GLD <sup>5,6,7,8</sup>
<b>Firesafe Seals</b>	GRAPHITE <sup>8</sup>
<b>High Performance Trim</b>	N/A
<b>Final Assembly and Test</b>	USA & ITALY
<b>Country Origin</b>	ITALY <sup>5,6,7,8</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

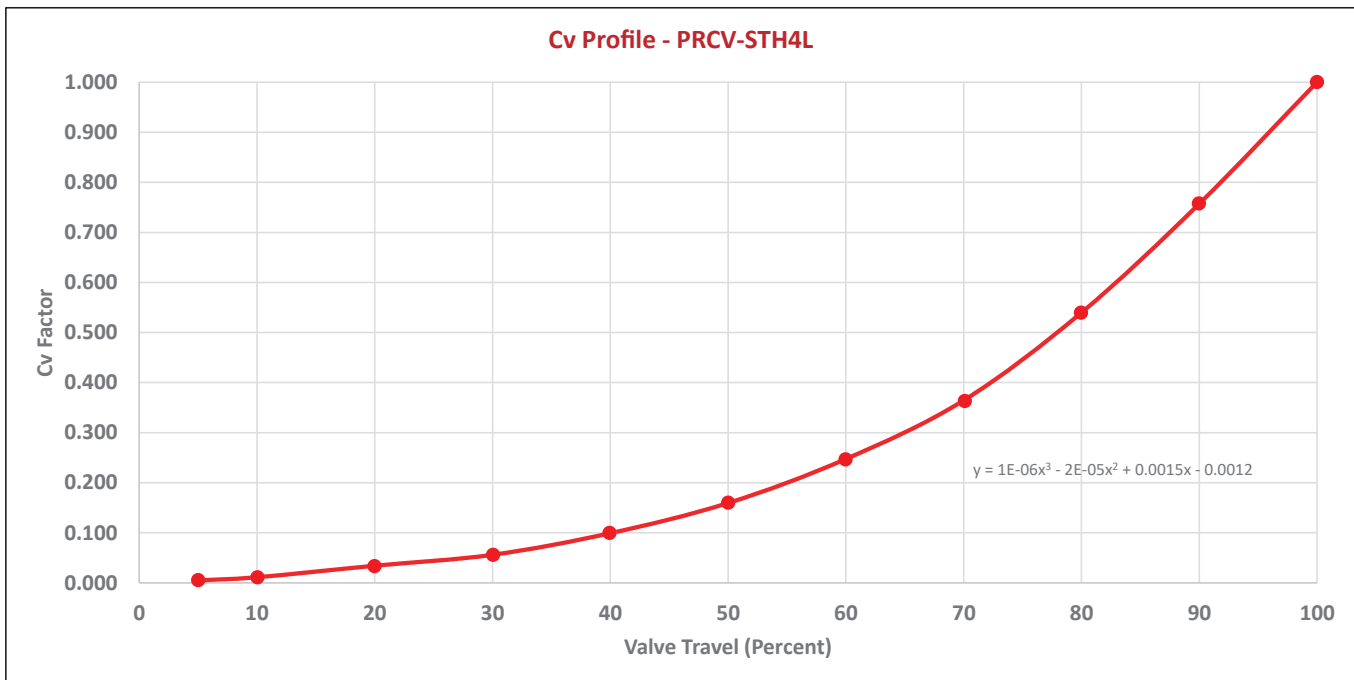


## CV PROFILE

### PERCENT TRAVEL

PRCV-STH4L	MIN	5	10	20	30	40	50	60	70	80	90	100
<b>Cv Factor</b>	<b>0.005</b>	<b>0.005</b>	<b>0.011</b>	<b>0.034</b>	<b>0.056</b>	<b>0.099</b>	<b>0.160</b>	<b>0.247</b>	<b>0.365</b>	<b>0.540</b>	<b>0.757</b>	<b>1.000</b>
6	3	3	7	22	36	64	104	161	236	350	491	649
8	6	6	13	40	65	115	184	285	420	623	873	1153
10	9	9	20	62	101	179	288	446	657	973	1365	1802
12	13	13	29	89	146	258	414	642	946	1401	1965	2595
16	23.1	23.1	52	158	259	458	736	1142	1682	2490	3493	4614
20	36	36	81	247	404	716	1150	1784	2628	3891	5458	7209
24	52	52	117	356	582	1031	1656	2569	3784	5603	7860	10381
<i>Xt</i>	0.862	0.865	0.862	0.859	0.852	0.841	0.829	0.820	0.811	0.778	0.649	0.278
<i>Fl</i>	0.962	0.972	0.962	0.946	0.933	0.923	0.921	0.923	0.918	0.876	0.753	0.493

### Cv PROFILE - PRCV-STH4L





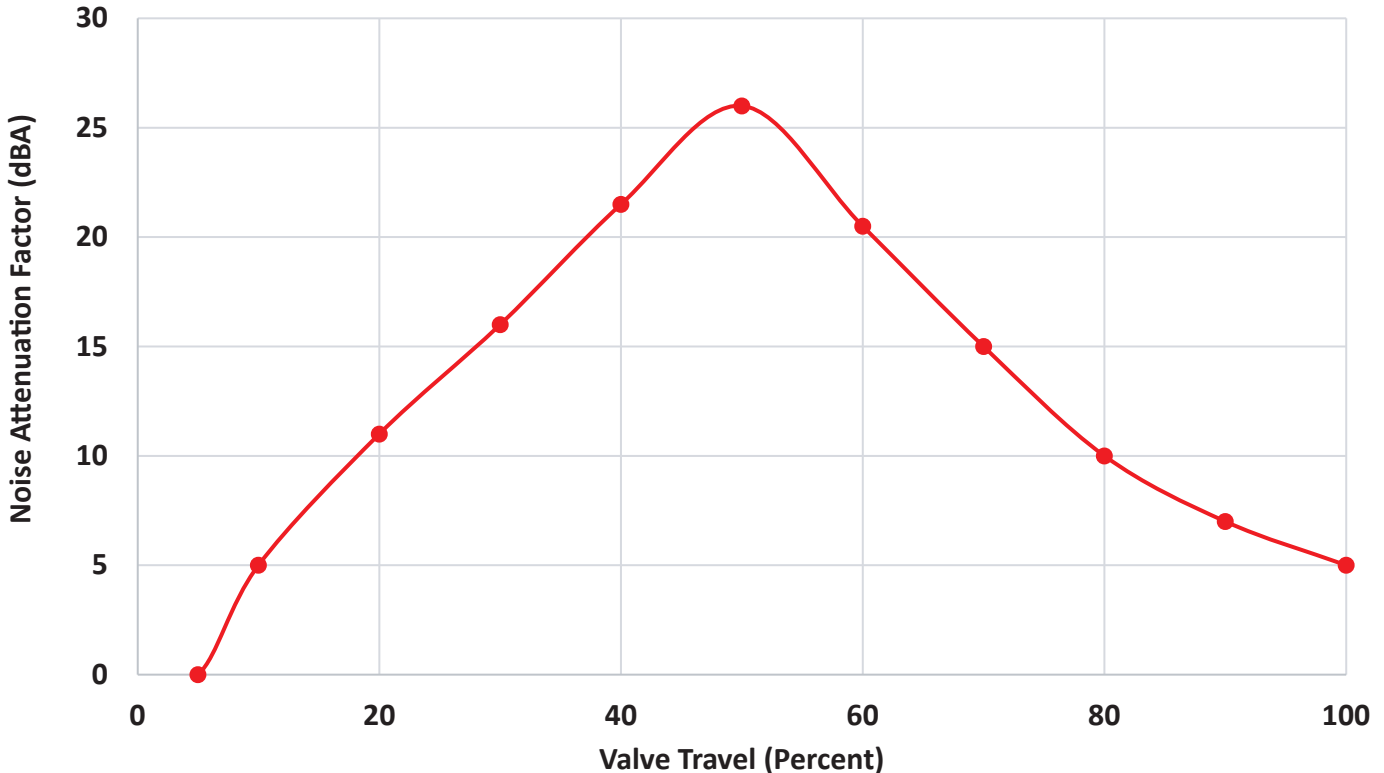
## NOISE ATTENUATION (DBA)

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

Percent Rotation	0	5	10	20	30	40	50	60	70	80	90	100
PRCV-PTH4L		0	5	11	16	21.5	26	20.5	15	10	7	5

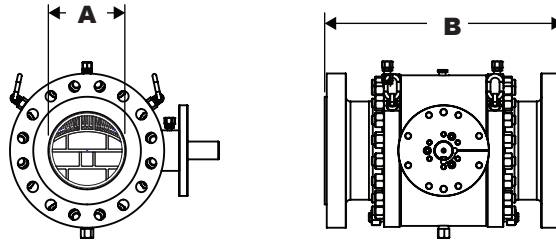
Noise Attenuation (dBA) vs. Rotation of PRCV Control Valve

Noise Attenuation Profile - PRCV-PTH4L





# PRCV-STH4L



**PRCV-STH4L 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	27.75	705
8"	200	18	457	19.75	502	26	660	29	737	32.75	832
10"	250	21	533	22.375	568	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	76.5	1943

**PRCV-STH4L Series Face to Face Dimensions (RFFE) - 55, B5, EB, VP PLATFORMS**

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	27.75	705
8"	200	18	457	19.75	502	26	660	29	737	32.75	832
10"	250	21	533	22.375	568	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	76.5	1943