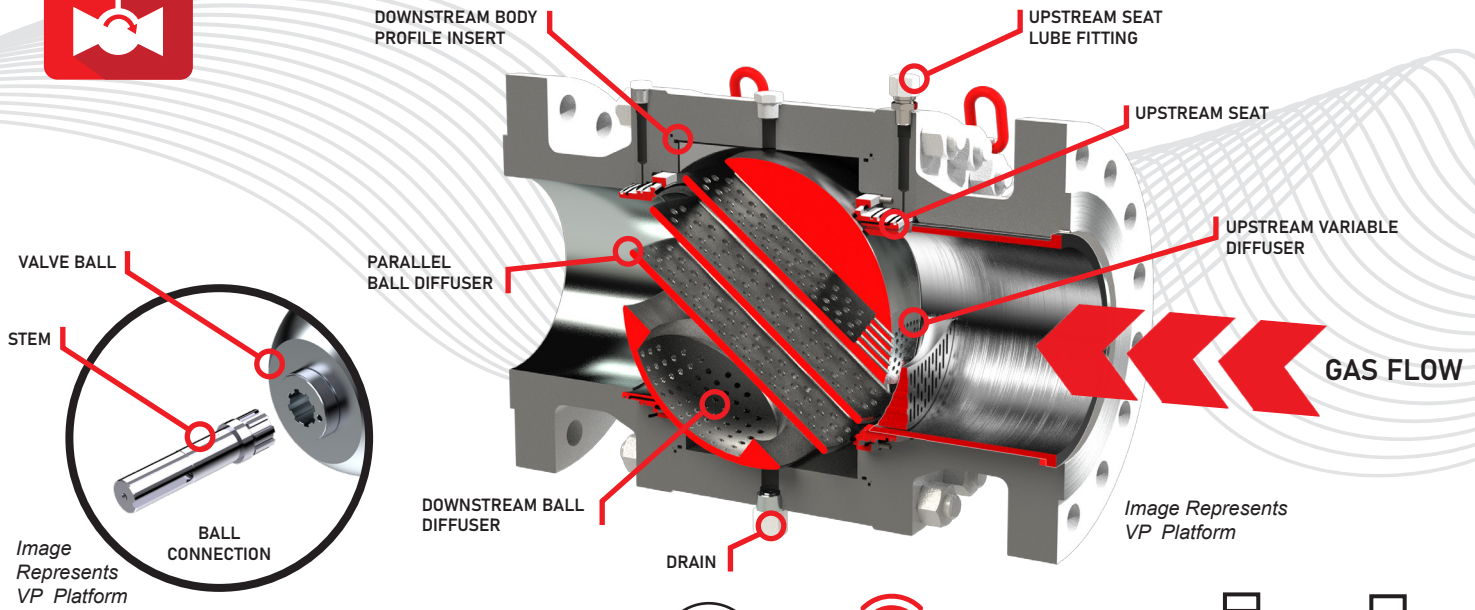
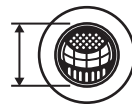




# PIPELINE ROTARY CONTROL VALVES



## PRCV-STH4



SIZE RANGE  
16 in to 24 in



MAX NOISE  
ATTENUATION  
27 dBA



MAX RANGE-ABILITY  
300:1



BELOW  
GROUND



ABOVE  
GROUND

### SPECS AND MATERIALS CONSTRUCTION

Size Range	16 in to 24 in
Max Noise Attenuation	27 dBA
Relative Capacity	High Capacity
Max Range-Ability	300:1
Shutoff	Class V

Design Standard	ASME B16.5 & B16.34, API 6FA / PED Compliant
Face-Face Dimensions	API-6D
Flange Dimensions	ASME B16.5
PED / ATEX / CE	Optional
ANSI Range	150 – 1500 ANSI
End Connections	RFFE, Weld, RTJ, Combo
Trim Type	Stealth Trim, Level 4
Performance Trim Technology	Upstream Variable Diffuser Upstream Fixed Diffuser Parallel Ball Diffuser Plates Downstream Ball Diffuser Downstream Body Profile Insert
Max Control ΔP	1440 psid
Max Shutoff ΔP	FULL ANSI ΔP
Compatible Buried Applications	YES
Flow Profile Curve	Exponential
Min Control Cv	0.33% Max Cv
Max Control Cv	85% Max Cv
Seats	1X Upstream Soft Seats Std Double Piston Effect
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>4,5,7,8</sup>
Stem	AISI 4140 + 1.0 mil ENP <sup>4,5,7</sup>
Ball	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
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>5,6,7,8</sup>
Seat Ring**	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	
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>5,6,7,8</sup>
Firesafe Seats	GRAPHITE <sup>8</sup>
High Performance Trim	N/A
Final Assembly and Test	USA & ITALY
Country Origin	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

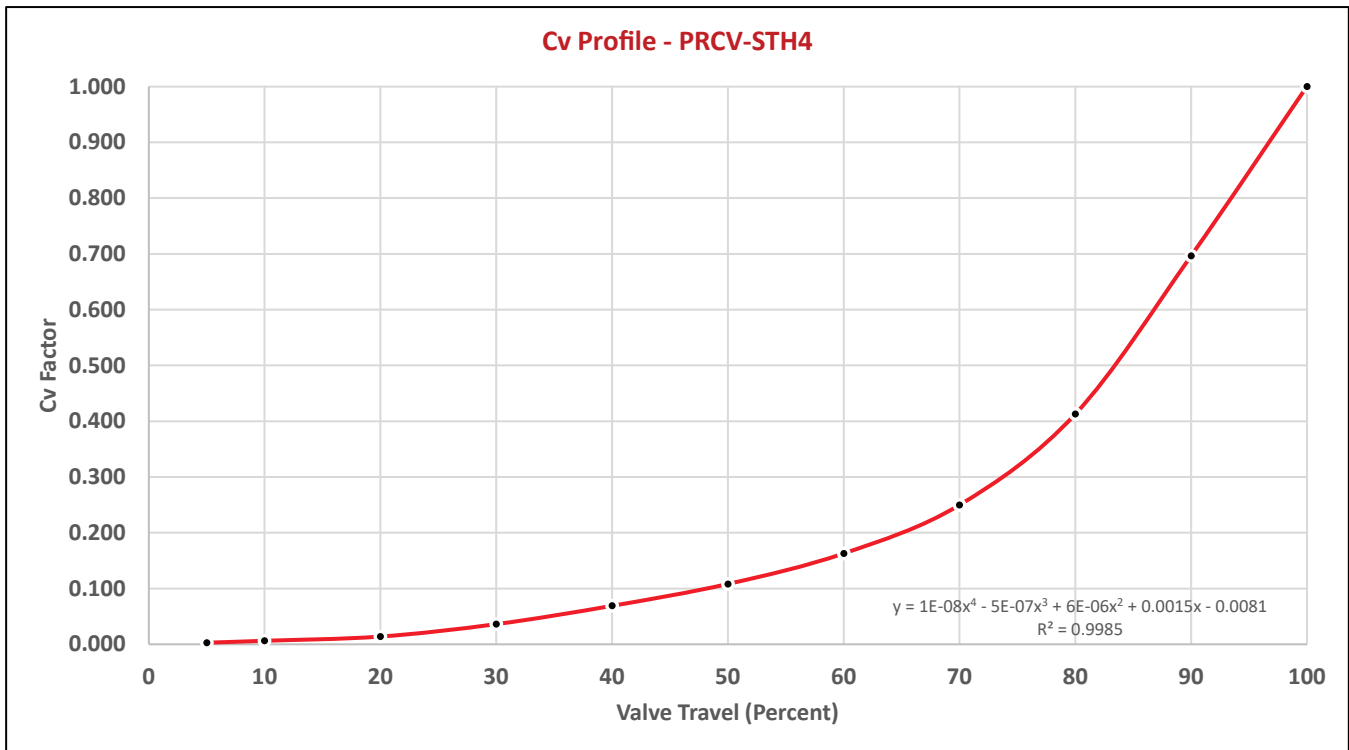


## CV PROFILE

### PERCENT TRAVEL

PRCV-STH4	MIN	5	10	20	30	40	50	60	70	80	90	100
<b>Cv Factor</b>	<b>0.003</b>	<b>0.003</b>	<b>0.006</b>	<b>0.014</b>	<b>0.036</b>	<b>0.069</b>	<b>0.108</b>	<b>0.163</b>	<b>0.250</b>	<b>0.413</b>	<b>0.696</b>	<b>1.000</b>
<b>6</b>	1.6	1.6	3.5	7.8	20.6	39.3	61.6	92.8	142.3	235.2	396.9	570
<b>8</b>	3.3	3.3	7.3	16.2	42.5	81.2	127.4	191.9	294.4	486.5	821.0	1179
<b>10</b>	5.3	5.33	11.90	26.36	69.02	131.87	206.84	311.61	477.96	789.88	1332.98	1914
<b>12</b>	6.5	6.5	14.5	32.1	84.0	160.5	251.7	379.2	581.6	961.2	1622.1	2329
<b>16</b>	11.5	11.5	25.7	57.0	149.3	285.3	447.4	674.1	1034.0	1708.7	2883.6	4141
<b>20</b>	18.0	18.0	40.2	89.1	233.3	445.7	699.1	1053.3	1615.6	2669.9	4505.7	6470
<b>24</b>	25.9	25.9	57.9	128.3	336.0	641.9	1006.8	1516.8	2326.5	3844.7	6488.3	9318
<b>Xt</b>	0.862	0.865	0.862	0.859	0.852	0.841	0.829	0.820	0.811	0.778	0.649	0.278
<b>FI</b>	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-STH4



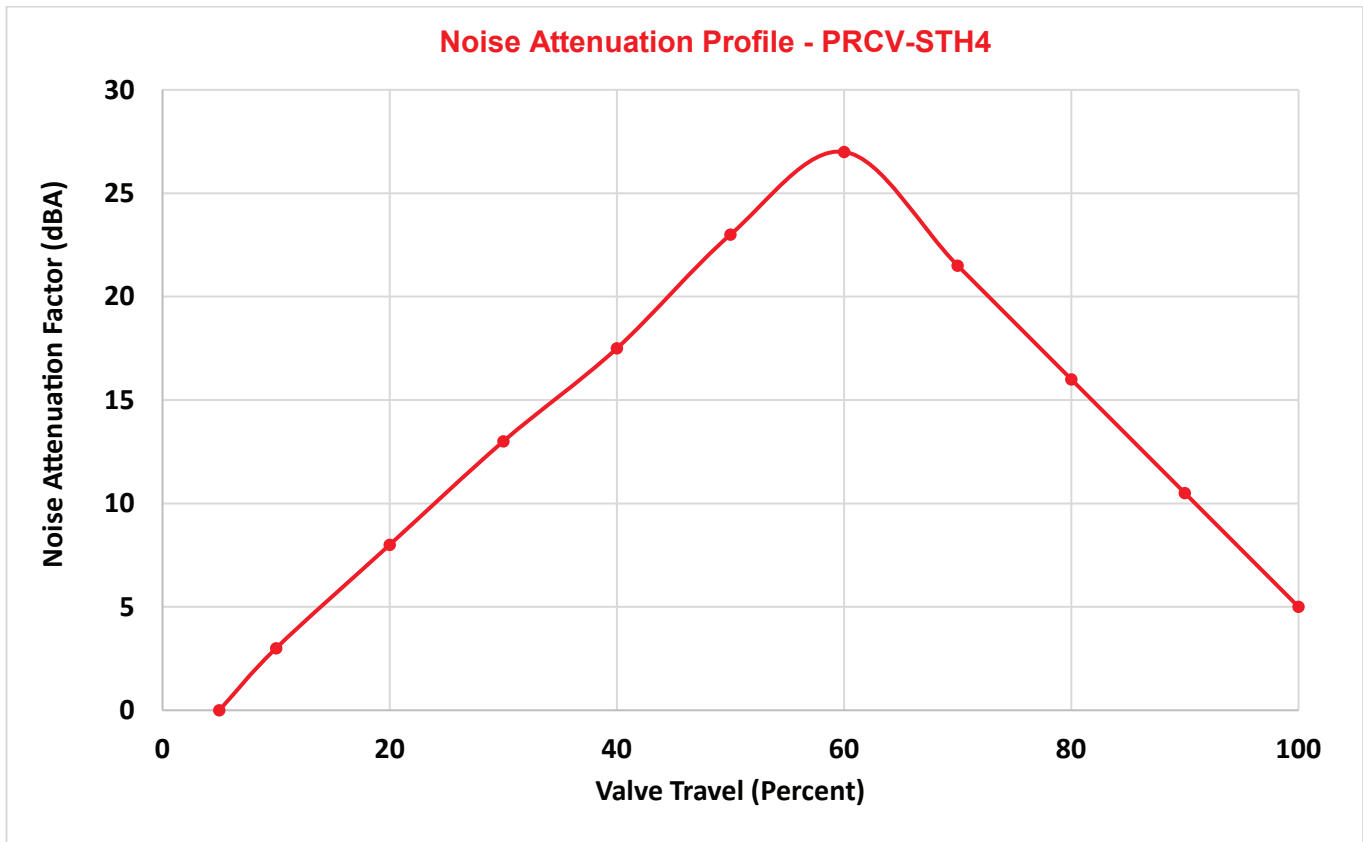


## NOISE ATTENUATION (DBA)

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

Percent Rotation	0	5	10	20	30	40	50	60	70	80	90	100
PRCV-PTH4		0	3	8	13	17.5	23	27	21.5	16	10.5	5

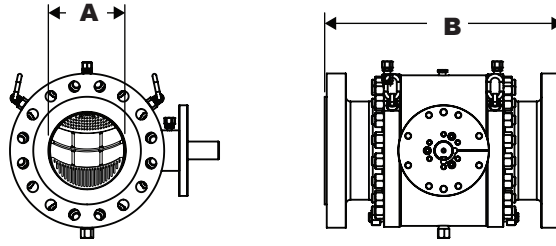
Noise Attenuation (dBA) vs. Rotation of PRCV Control Valve





# PIPELINE ROTARY CONTROL VALVES

## PRCV-STH4



### PRCV-STH4 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)
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	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-STH4 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)
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	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