



PRCV-STH4

PIPELINE ROTARY CONTROL VALVES



Size Range	6 in to 30 in
Max Noise Attenuation	27 dBA
Relative Capacity	High Capacity
Max Range-Ability	300:1
Shutoff	Class IV

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 / 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 ^{5,6,7,8}
Firesafe Seals	GRAPHITE ⁸
High Performance Trim	N/A
Final Assembly and Test	USA & ITALY
Country Origin	ITALY ^{5,6,7,8}
Body (Forged)	A350 LF2 ^{4,5,7,8}
Stem	AISI 4140 + 1.0 mil ENP ^{4,5,7}
Ball	174-PH SS ⁸ 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 ^{5,6,7,8}
Seat Ring**	A350 LF2 + ENP ^{5,6,7,8} , Optional SS ⁸ VRG Spec Seat Springs ^{4,5,7,8}

- 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



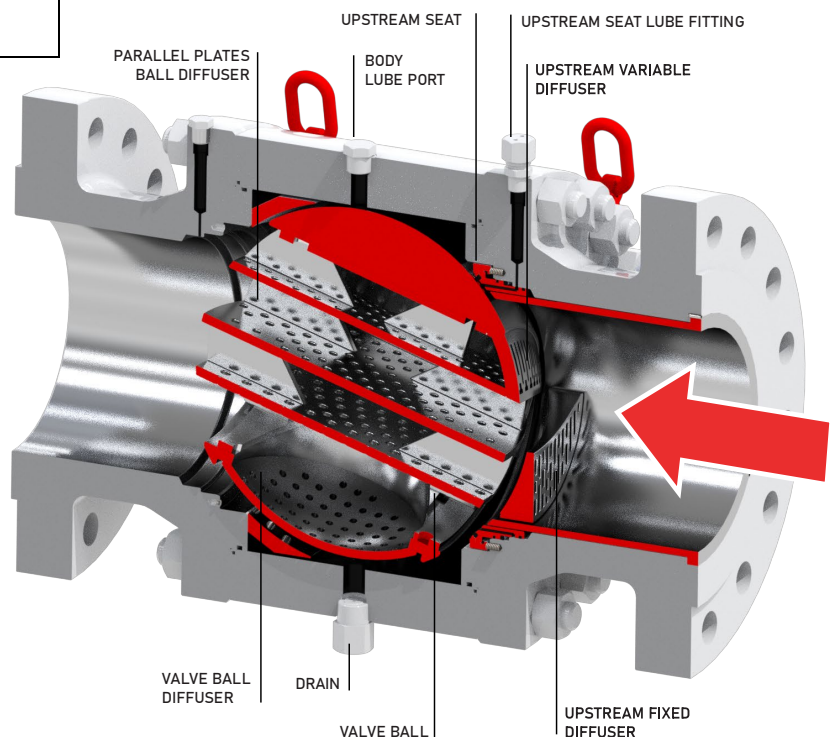
SIZE RANGE
6 in to 30 in



MAX NOISE
ATTENUATION
27 dBA



MAX RANGE-ABILITY
300:1

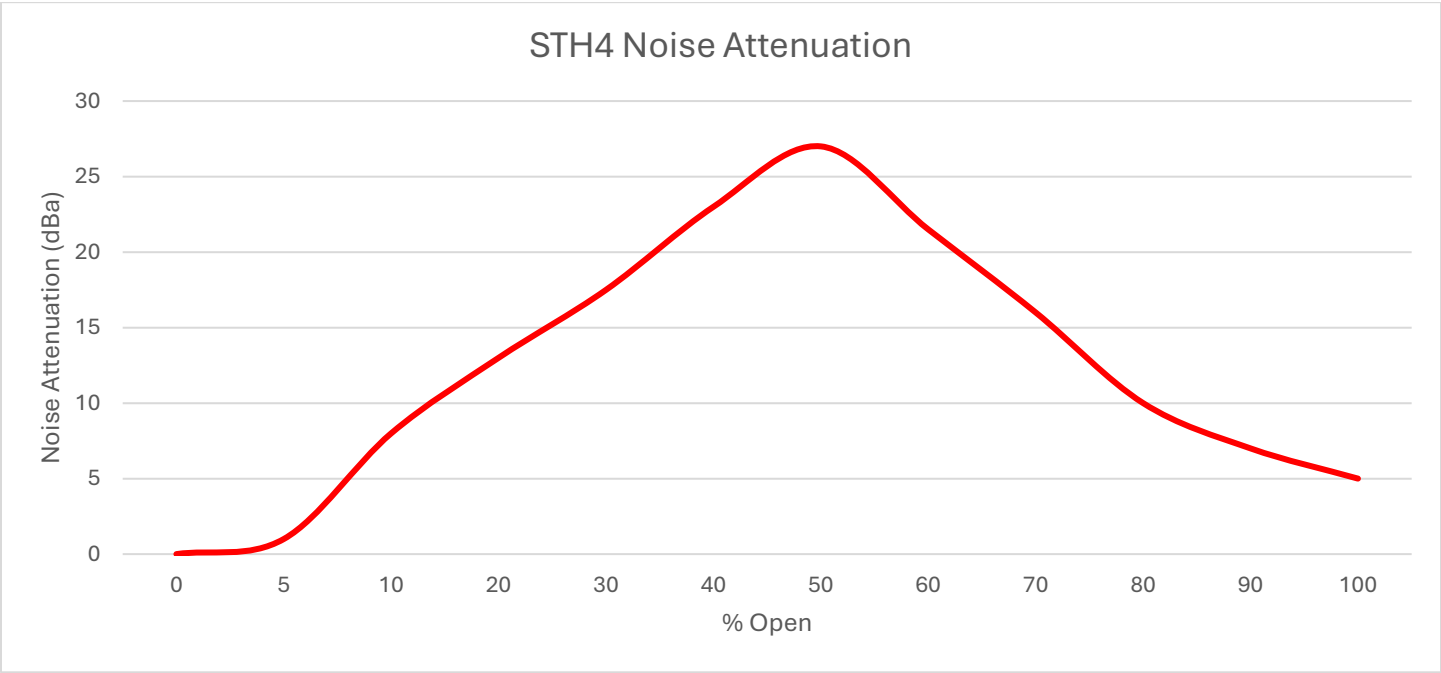




NOISE ATTENUATION (DBA)

Percent Rotation	0	5	10	20	30	40	50	60	70	80	90	100
PRCV-STH4	0	8	13	17.5	23	27	21.5	16	10	7	5	3

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





PRCV-STH4

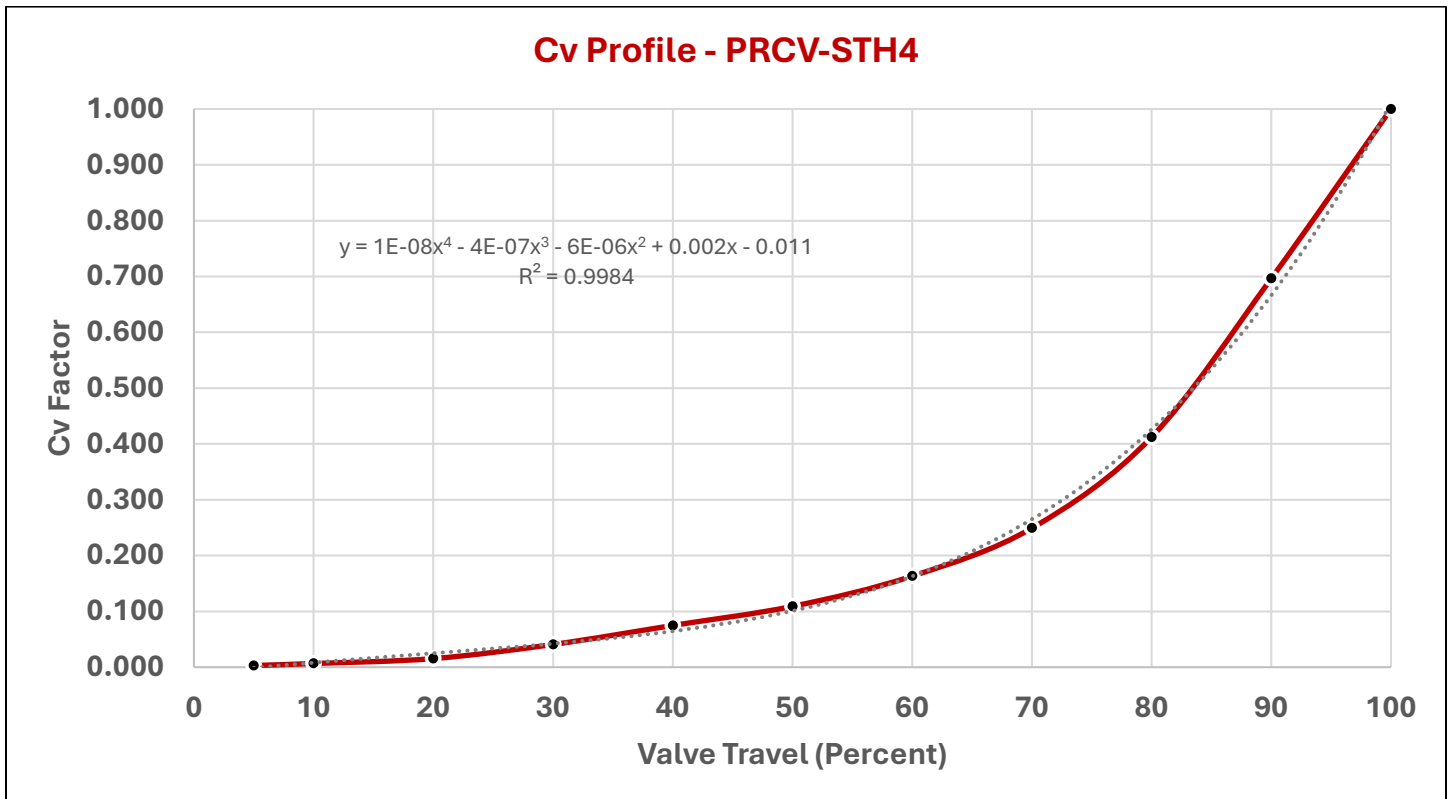
PIPELINE ROTARY CONTROL VALVES



CV PROFILE

PRCV-STH4	MIN	5	10	20	30	40	50	60	70	80	90	100
Cv Factor	0.003	0.003	0.007	0.015	0.041	0.075	0.109	0.163	0.249	0.412	0.696	1.000
6	1.8	1.8	4	9	23	43	62	93	142	235	397	570
8	3.3	3.3	8	18	48	88	129	192	294	486	821	1179
10	5.3	5.3	13	29	78	143	209	312	477	789	1333	1914
12	6.5	6.5	15	36	95	174	254	380	580	960	1622	2329
16	12.0	12.0	27	64	169	310	451	676	1032	1707	2884	4141
20	18.0	18.0	43	100	263	484	705	1056	1612	2667	4506	6470
24	26.0	26.0	61	143	379	697	1016	1520	2321	3842	6490	9318
30	44	44	96	224	593	1089	1587	2375	3627	6002	10140	14559

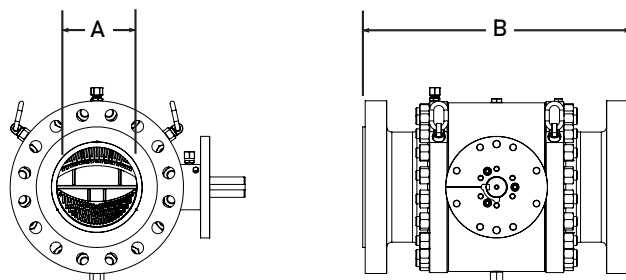
CV PROFILE – PRCV-STH4





PRCV-STH4

PIPELINE ROTARY CONTROL VALVES



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	
In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(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
30"	750	55	1397	55	1397	65	1651	0	0	0	0

PRCV-STH4 Series Standard Weights 54 / 55 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	403	183	448	203	564	256	748	339	1072	486
8"	200	713	323	771	349	1047	475	1099	499	1546	701
10"	250	908	412	1139	516	1313	596	2052	930	2512	1139
12"	300	1461	662	1486	674	1994	904	2627	1192	3531	1601
16"	400	2176	987	2696	1223	3336	1513	4273	1938	10346	4692
20"	500	4214	1912	5078	2304	6090	2763	7268	3297	19549	8868
24"	600	8275	3754	8069	3660	9199	4173	11707	5310	0	0
30"	750	12369	5610	13915	6311	16076	7292	0	0	0	0

PRCV-STH4 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	412	187	456	207	639	290	828	375	1115	506
8"	200	674	306	782	355	1086	492	1472	668	1886	855
10"	250	1081	490	1187	538	1670	757	2281	1035	3725	1690
12"	300	1598	725	1794	814	2724	1236	3337	1513	5422	2459
16"	400	2771	1257	3403	1544	4463	2024	5255	2383	10371	4704
20"	500	4841	2196	5266	2388	7312	3317	10025	4547	15590	7072
24"	600	7358	3338	8882	4029	12992	5893	16164	7332	26558	12047
30"	750	12348	5601	16395	7437	19683	8928	28604	12975	0	0