







		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006					
		Owner Job No:			Sheet No: 1 of 18					
General Data	1	Tag No.		PCV-1161						
	2	Service		NHC TO V 114						
	3	P&ID No.	Piping Size	Class	Line No	011	1/4"	Tubing	1101	
	4	Fluid		State		Nitrogen		Gas		
	5	Pressure rating		Piping material						
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		100		
process condition	8	Normal Temperature		Unit		AMB		°C		
	9	Max Temperature		Unit		100		°C		
	10	Normal Pressure		Unit		40 - 60		barg		
Flow Rate	11	Max Pressure		Unit		70		barg		
	12	Max.Continuous		Unit		0.25		Kg/h		
	13	Min.Continuous		Unit		0.025		Kg/h		
	14	Max.In Transients		Unit		0.3		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		80 - 200		barg		
	17	Dp. At max. flowrate		Unit		20 - 140		bar		
	18	Max. Dp with closed valve		Unit		200		bar		
Temperature	19	Norm . upstr. Temp		Unit		AMB		°C		
	20	Max . upstr. Temp		Unit		100		°C		
Sp. Gr.	21	Gases vapours		Unit		98.8 - 220		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		28		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.019				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		30 - 65		barg		
	27	Installation				LOCAL				
	28	Pressure increase valve				CLOSES				
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		SS-304		
Body	31	Size Body		Port		1/4"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class				ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction				FTO				
	37	Bonnet type				Standard				
	38	Back Pressure Range				VTA				
	39	D.PRESS (DESIGN)				VTA				
	40	D.TEMP (DESIGN)				VTA				
Trim	41	Plug type		Plug material		Contoured		SS - 316		
	42	Characteristics				Equal Percentage				
	43	Seat Material		Cage/Guide Material		SS - 316		NA		
Actuator	44	Type / Material				Diaphragm/VTA				
	45	Spring range				VTA				
Notes:										
1	0	12/23/2021		IFA		K.A		M.N		AA.SH
No.	Rev	Date		Status		Prepared		Checked		Approved


		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006					
		Owner Job No:			Sheet No: 2 of 18					
General Data	1	Tag No.		PCV-1162						
	2	Service		NIT TO V 113						
	3	P&ID No.	Piping Size	Class	Line No	011	1/2"	1CS2	1101	
	4	Fluid		State		Nitrogen		Gas		
	5	Pressure rating		Piping material		150#		Stainless Steel		
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		100		
process condition	8	Normal Temperature		Unit		AMB		°C		
	9	Max Temperature		Unit		100		°C		
	10	Normal Pressure		Unit		5		barg		
	11	Max Pressure		Unit		7		barg		
Flow Rate	12	Max.Continuous		Unit		0.08		Kg/h		
	13	Min.Continuous		Unit		0.008		Kg/h		
	14	Max.In Transients		Unit		0.096		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		5		barg		
	17	Dp. At max. flowrate		Unit		2 - 4		bar		
	18	Max. Dp with closed valve		Unit		7		bar		
Temperature	19	Norm . upstr. Temp		Unit		AMB		°C		
	20	Max . upstr. Temp		Unit		100		°C		
Sp. Gr.	21	Gases vapours		Unit		6.8		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		28		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.018				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		2 - 4		barg		
	27	Installation				LOCAL				
	28	Pressure increase valve				CLOSES				
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		SS-304		
Body	31	Size Body		Port		1/2"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction				FTO				
	37	Bonnet type				Standard				
	38	Back Pressure Range				VTA				
	39	D.PRESS (DESIGN)				VTA				
	40	D.TEMP (DESIGN)				VTA				
Trim	41	Plug type		Plug material		Contoured		SS - 316		
	42	Characteristics				Equal Percentage				
	43	Seat Material		Cage/Guide Material		SS - 316		NA		
Actuator	44	Type / Material				Diaphragm/VTA				
	45	Spring range				VTA				
Notes:										
1	0	12/23/2021		IFA		K.A		M.N		AA.SH
No.	Rev	Date		Status		Prepared		Checked		Approved


		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006					
		Owner Job No:			Sheet No: 3 of 18					
General Data	1	Tag No.		PCV-1258						
	2	Service		NIT TO V 125A						
	3	P&ID No.	Piping Size	Class	Line No	012	1/2"	1CS2	1207	
	4	Fluid		State		Nitrogen		Gas		
	5	Pressure rating		Piping material		150#		Stainless Steel		
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		100		
process condition	8	Normal Temperature		Unit		AMB		°C		
	9	Max Temperature		Unit		100		°C		
	10	Normal Pressure		Unit		0.1		barg		
	11	Max Pressure		Unit		7		barg		
Flow Rate	12	Max.Continuous		Unit		0.08		Kg/h		
	13	Min.Continuous		Unit		0.008		Kg/h		
	14	Max.In Transients		Unit		0.096		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		5		barg		
	17	Dp. At max. flowrate		Unit		4.8		bar		
	18	Max. Dp with closed valve		Unit		7		bar		
Temperature	19	Norm . upstr. Temp		Unit		AMB		°C		
	20	Max . upstr. Temp		Unit		100		°C		
Sp. Gr.	21	Gases vapours		Unit		6.8		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		28		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.018				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		0.05 - 0.15		barg		
	27	Installation						LOCAL		
	28	Pressure increase valve						CLOSES		
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		SS-304		
Body	31	Size Body		Port		1/2"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction						FTO		
	37	Bonnet type						Standard		
	38	Back Pressure Range						VTA		
Trim	39	D.PRESS (DESIGN)						VTA		
	40	D.TEMP (DESIGN)						VTA		
	41	Plug type		Plug material		Contoured		SS - 316		
	42	Characteristics						Equal Percentage		
Actuator	43	Seat Material		Cage/Guide Material		SS - 316		NA		
	44	Type / Material						Diaphragm/VTA		
	45	Spring range						VTA		
Notes:										
1	0	12/23/2021		IFA		K.A		M.N		AA.SH
No.	Rev	Date		Status		Prepared		Checked		Approved


		PROJECT: PP-PE PILOT PLANT				 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی				
		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:		Doc. No: 900-DAS-A4-IN-0006						
		Owner Job No:		Sheet No: 4 of 18						
General Data	1	Tag No.		PCV-1259						
	2	Service		NIT TO V 125B						
	3	P&ID No.	Piping Size	Class	Line No	012	1/2"	1CS2	1206	
	4	Fluid		State		Nitrogen		Gas		
	5	Pressure rating		Piping material		150#		Stainless Steel		
	6	Amb.Temp	Amb.Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		100		
process condition	8	Normal Temperature		Unit		AMB		°C		
	9	Max Temperature		Unit		100		°C		
	10	Normal Pressure		Unit		0.1		barg		
Flow Rate	11	Max Pressure		Unit		7		barg		
	12	Max.Continuous		Unit		0.08		Kg/h		
	13	Min.Continuous		Unit		0.008		Kg/h		
	14	Max.In Transients		Unit		0.096		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		5		barg		
	17	Dp. At max. flowrate		Unit		4.8		bar		
	18	Max. Dp with closed valve		Unit		7		bar		
Temperature	19	Norm . upstr. Temp		Unit		AMB		°C		
	20	Max . upstr. Temp		Unit		100		°C		
Sp. Gr.	21	Gases vapours		Unit		6.8		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		28		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.018				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		0.05 - 0.15		barg		
	27	Installation				LOCAL				
	28	Pressure increase valve				CLOSES				
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		SS-304		
Body	31	Size Body		Port		1/2"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction				FTO				
	37	Bonnet type				Standard				
	38	Back Pressure Range				VTA				
	39	D.PRESS (DESIGN)				VTA				
	40	D.TEMP (DESIGN)				VTA				
	41	Plug type		Plug material		Contoured		SS - 316		
Trim	42	Characteristics				Equal Percentage				
	43	Seat Material		Cage/Guide Material		SS - 316		NA		
Actuator	44	Type / Material				Diaphragm/VTA				
	45	Spring range				VTA				
Notes:										
1	0	12/23/2021	IFA		K.A		M.N		AA.SH	
No.	Rev	Date	Status		Prepared		Checked		Approved	


		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006					
		Owner Job No:			Sheet No: 5 of 18					
General Data	1	Tag No.		PCV-1356						
	2	Service		NIT TO V 131						
	3	P&ID No.	Piping Size	Class	Line No	013	1/2"	1CS2	1302	
	4	Fluid		State		Nitrogen		Gas		
	5	Pressure rating		Piping material		150#		Stainless Steel		
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		100		
process condition	8	Normal Temperature		Unit		AMB		°C		
	9	Max Temperature		Unit		100		°C		
	10	Normal Pressure		Unit		0.2		barg		
	11	Max Pressure		Unit		7		barg		
Flow Rate	12	Max.Continuous		Unit		0.08		Kg/h		
	13	Min.Continuous		Unit		0.008		Kg/h		
	14	Max.In Transients		Unit		0.096		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		5		barg		
	17	Dp. At max. flowrate		Unit		4.8		bar		
	18	Max. Dp with closed valve		Unit		7		bar		
Temperature	19	Norm . upstr. Temp		Unit		AMB		°C		
	20	Max . upstr. Temp		Unit		100		°C		
Sp. Gr.	21	Gases vapours		Unit		6.8		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		28		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.018				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		0.1 - 0.5		barg		
	27	Installation				LOCAL				
	28	Pressure increase valve				CLOSES				
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		SS-304		
Body	31	Size Body		Port		1/2"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction				FTO				
	37	Bonnet type				Standard				
	38	Back Pressure Range				VTA				
Trim	39	D.PRESS (DESIGN)				VTA				
	40	D.TEMP (DESIGN)				VTA				
	41	Plug type		Plug material		Contoured		SS - 316		
	42	Characteristics				Equal Percentage				
Actuator	43	Seat Material		Cage/Guide Material		SS - 316		NA		
	44	Type / Material				Diaphragm/VTA				
	45	Spring range				VTA				
Notes:										
1	0	12/23/2021		IFA		K.A		M.N		AA.SH
No.	Rev	Date		Status		Prepared		Checked		Approved


		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Pressure Regulator Valve Data Sheet							
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006				
		Owner Job No:			Sheet No: 8 of 12				
General Data	1	Tag No.			PCV-1455				
	2	Service							
	3	P&ID No.	Piping Size	Class	Line No	014	1/2"	1CS2	1402
	4	Fluid		State		Nitrogen		Gas	
	5	Pressure rating		Piping material		150#		Stainless Steel	
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara	86%
	7	Area Classification		Area		ZONE 1		100	
process condition	8	Normal Temperature		Unit		AMB		-C	
	9	Max Temperature		Unit		100		-C	
	10	Normal Pressure		Unit		5		barg	
	11	Max Pressure		Unit		7		barg	
Flow Rate	12	Max.Continuous		Unit		0.08		Kg/h	
	13	Min.Continuous		Unit		0.008		Kg/h	
	14	Max.In Transients		Unit		0.096		Kg/h	
	15	Allow. with closed valve		Unit		0		Kg/h	
Press	16	Norm . Op. upstr. Press		Unit		5		barg	
	17	Dp. At max. flowrate		Unit		4.8		bar	
	18	Max. Dp with closed valve		Unit		7		bar	
Temperature	19	Norm . upstr. Temp		Unit		AMB.		-C	
	20	Max . upstr. Temp		Unit		100		-C	
Sp. Gr.	21	Gases vapours		Unit		6.8		Kg/m3	
	22	Liquids		Unit				Kg/m3	
	23	Mol.weight		Unit		28		Kg/Kmol	
Visc.	24	Op. visc. (when>5mpa's)			0.018				
	25	Solid in suspension							
INSTRUMENT	26	Range (SET POINT)		Unit		0.1 - 0.5		barg	
	27	Installation			LOCAL				
	28	Pressure increase valve							
Cv	29	Min/Norm/Max		Required		VTA		VTA	
	30	Body type		Body material		Globe		SS-304	
Body	31	Size Body		Port		1/2"		Single	
	32	Design Pressure		Min. Bar a Max. Bar a				Barg	
	33	Design Temperature		Min. °C Max. °C				-C	
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV	
	35	Packing mat.		Lubricator		PTFE		VTA	
	36	Flow direction			FTO				
	37	Bonnet type			Standard				
	38	SEAT Leakage Class ANSI			IV				
	39	Back Pressure Range			VTA				
	40	D.PRESS (DESIGN)			VTA				
41	D.TEMP (DESIGN)			VTA					
Trim	42	Plug type		Plug material		Contoured		SS - 316	
	43	Characteristics			Equal Percentage				
	44	Seat Material		Cage/Guide Material		SS - 316		NA	
Actuator	45	Type / Material			Diaphragm/VTA				
	46	Spring range			VTA				
Notes :									
1	0	12/23/2021		IFA		K.A		M.N	
No.	Rev	Date		Status		Prepared		Checked	
								AA.SH	
								Approved	


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		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006					
		Owner Job No:			Sheet No: 8 of 18					
General Data	1	Tag No.		PCV-3455						
	2	Service		TK 341 PRESS.						
	3	P&ID No.	Piping Size	Class	Line No	034	1/2"	1CS2	3402	
	4	Fluid		State		Nitrogen		Gas		
	5	Pressure rating		Piping material		150#		Stainless Steel		
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		300		
process condition	8	Normal Temperature		Unit		AMB		°C		
	9	Max Temperature		Unit		100		°C		
	10	Normal Pressure		Unit		0.5		barg		
	11	Max Pressure		Unit		3.5		barg		
Flow Rate	12	Max.Continuous		Unit		0.3		Kg/h		
	13	Min.Continuous		Unit		0.03		Kg/h		
	14	Max.In Transients		Unit		0.36		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		5		barg		
	17	Dp. At max. flowrate		Unit		4.8		bar		
	18	Max. Dp with closed valve		Unit		7		bar		
Temperature	19	Norm . upstr. Temp		Unit		AMB		°C		
	20	Max . upstr. Temp		Unit		100		°C		
Sp. Gr.	21	Gases vapours		Unit		6.8		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		28		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.018				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		0.2 - 0.7		barg		
	27	Installation				LOCAL				
	28	Pressure increase valve				CLOSES				
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		SS-304		
Body	31	Size Body		Port		1/2"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction				FTO				
	37	Bonnet type				Standard				
	38	Back Pressure Range				VTA				
Trim	39	D.PRESS (DESIGN)				VTA				
	40	D.TEMP (DESIGN)				VTA				
	41	Plug type		Plug material		Contoured		SS - 316		
	42	Characteristics				Equal Percentage				
Actuator	43	Seat Material		Cage/Guide Material		SS - 316		NA		
	44	Type / Material				Diaphragm/VTA				
	45	Spring range				VTA				
Notes:										
1	0	12/23/2021		IFA		K.A		M.N		AA.SH
No.	Rev	Date		Status		Prepared		Checked		Approved

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		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006					
		Owner Job No:			Sheet No: 9 of 18					
General Data	1	Tag No.		PCV-3456						
	2	Service		V 342 PRESS						
	3	P&ID No.	Piping Size	Class	Line No	034	1/2"	1CS2	3404	
	4	Fluid		State		Nitrogen		Gas		
	5	Pressure rating		Piping material		150#		Stainless Steel		
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		300		
process condition	8	Normal Temperature		Unit		AMB		°C		
	9	Max Temperature		Unit		100		°C		
	10	Normal Pressure		Unit		0.3		barg		
	11	Max Pressure		Unit		0.1		barg		
Flow Rate	12	Max.Continuous		Unit		0.3		Kg/h		
	13	Min.Continuous		Unit		0.03		Kg/h		
	14	Max.In Transients		Unit		0.36		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		5		barg		
	17	Dp. At max. flowrate		Unit		4.5		bar		
	18	Max. Dp with closed valve		Unit		7		bar		
Temperature	19	Norm . upstr. Temp		Unit		AMB		°C		
	20	Max . upstr. Temp		Unit		100		°C		
Sp. Gr.	21	Gases vapours		Unit		6.8		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		28		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.018				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		0.01 - 0.05		barg		
	27	Installation						LOCAL		
	28	Pressure increase valve						CLOSES		
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		SS-304		
Body	31	Size Body		Port		1/2"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction						FTO		
	37	Bonnet type						Standard		
	38	Back Pressure Range						VTA		
Trim	39	D.PRESS (DESIGN)						VTA		
	40	D.TEMP (DESIGN)						VTA		
	41	Plug type		Plug material		Contoured		SS - 316		
	42	Characteristics						Equal Percentage		
Actuator	43	Seat Material		Cage/Guide Material		SS - 316		NA		
	44	Type / Material						Diaphragm/VTA		
	45	Spring range						VTA		
Notes:										
1	0	12/23/2021		IFA		K.A		M.N		AA.SH
No.	Rev	Date		Status		Prepared		Checked		Approved

		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Pressure Regulator Valve Data Sheet								
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006					
		Owner Job No:			Sheet No: 11 of 18					
General Data	1	Tag No.		PCV-3556						
	2	Service		LPS FT 351 JACKET						
	3	P&ID No.	Piping Size	Class	Line No	035	1/2"	3CC6 (IA)	3503	
	4	Fluid		State		STEAM		Gas		
	5	Pressure rating		Piping material		150#		Carbon Steel		
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara		86%
	7	Area Classification		Area		ZONE 1		300		
process condition	8	Normal Temperature		Unit		100 - 110		°C		
	9	Max Temperature		Unit		180		°C		
	10	Normal Pressure		Unit		0.1		barg		
	11	Max Pressure		Unit		6.5		barg		
Flow Rate	12	Max.Continuous		Unit		8		Kg/h		
	13	Min.Continuous		Unit		0.8		Kg/h		
	14	Max.In Transients		Unit		9.6		Kg/h		
	15	Allow. with closed valve		Unit		0		Kg/h		
Press	16	Norm . Op. upstr. Press		Unit		5.5		barg		
	17	Dp. At max. flowrate		Unit		5		bar		
	18	Max. Dp with closed valve		Unit		6.5		bar		
Temperature	19	Norm . upstr. Temp		Unit		155		°C		
	20	Max . upstr. Temp		Unit		180		°C		
Sp. Gr.	21	Gases vapours		Unit		3.3		Kg/m3		
	22	Liquids		Unit				Kg/m3		
	23	Mol.weight		Unit		18		Kg/Kmol		
Visc.	24	Op. visc. (when>5mpa's)				0.014				
	25	Solid in suspension								
INSTRUMENT	26	Range (SET POINT)		Unit		0 - 0.3		barg		
	27	Installation				LOCAL				
	28	Pressure increase valve				CLOSES				
Cv	29	Min/Norm/Max		Required		VTA		VTA		
	30	Body type		Body material		Globe		Carbon Steel		
Body	31	Size Body		Port		1/2"		Single		
	32	Design Pressure		Min. Bar a Max. Bar a				Barg		
	33	Design Temperature		Min. °C Max. °C				°C		
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV		
	35	Packing mat.		Lubricator		PTFE		VTA		
	36	Flow direction				FTO				
	37	Bonnet type				Standard				
	38	Back Pressure Range				VTA				
	39	D.PRESS (DESIGN)				VTA				
	40	D.TEMP (DESIGN)				VTA				
Trim	41	Plug type		Plug material		Contoured		SS - 316		
	42	Characteristics				Equal Percentage				
	43	Seat Material		Cage/Guide Material		SS - 316		NA		
Actuator	44	Type / Material				Diaphragm/VTA				
	45	Spring range				VTA				
Notes:										
1	0	12/23/2021		IFA		K.A		M.N		AA.SH
No.	Rev	Date		Status		Prepared		Checked		Approved

		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Pressure Regulator Valve Data Sheet							
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006				
		Owner Job No:			Sheet No: 12 of 18				
General Data	1	Tag No.		PCV-3557					
	2	Service		LPS TO V 351					
	3	P&ID No.	Piping Size	Class	Line No	035	1/2"	3CC6 (IA)	3502
	4	Fluid		State		STEAM		Gas	
	5	Pressure rating		Piping material		150#		Carbon Steel	
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara	86%
	7	Area Classification		Area		ZONE 1		300	
process condition	8	Normal Temperature		Unit		135		°C	
	9	Max Temperature		Unit		180		°C	
	10	Normal Pressure		Unit		2.5		barg	
	11	Max Pressure		Unit		6.5		barg	
Flow Rate	12	Max.Continuous		Unit		8		Kg/h	
	13	Min.Continuous		Unit		0.8		Kg/h	
	14	Max.In Transients		Unit		9.6		Kg/h	
	15	Allow. with closed valve		Unit		0		Kg/h	
Press	16	Norm . Op. upstr. Press		Unit		5.5		barg	
	17	Dp. At max. flowrate		Unit		3		bar	
	18	Max. Dp with closed valve		Unit		6.5		bar	
Temperature	19	Norm . upstr. Temp		Unit		155		°C	
	20	Max . upstr. Temp		Unit		180		°C	
Sp. Gr.	21	Gases vapours		Unit		3.3		Kg/m3	
	22	Liquids		Unit				Kg/m3	
	23	Mol.weight		Unit		18		Kg/Kmol	
Visc.	24	Op. visc. (when>5mpa's)				0.014			
	25	Solid in suspension							
INSTRUMENT	26	Range (SET POINT)		Unit		1 - 3		barg	
	27	Installation						LOCAL	
	28	Pressure increase valve						CLOSES	
Cv	29	Min/Norm/Max		Required		VTA		VTA	
	30	Body type		Body material		Globe		Carbon Steel	
Body	31	Size Body		Port		1/2"		Single	
	32	Design Pressure		Min. Bar a	Max. Bar a			Barg	
	33	Design Temperature		Min. °C	Max. °C			°C	
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV	
	35	Packing mat.		Lubricator		PTFE		VTA	
	36	Flow direction						FTO	
	37	Bonnet type						Standard	
	38	Back Pressure Range						VTA	
	39	D.PRESS (DESIGN)						VTA	
	40	D.TEMP (DESIGN)						VTA	
Trim	41	Plug type		Plug material		Contoured		SS - 316	
	42	Characteristics						Equal Percentage	
	43	Seat Material		Cage/Guide Material		SS - 316		NA	
Actuator	44	Type / Material						Diaphragm/VTA	
	45	Spring range						VTA	
Notes:									
1	0	12/23/2021		IFA		K.A		M.N	
No.	Rev	Date		Status		Prepared		Checked	
								AA.SH	
								Approved	

		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Pressure Regulator Valve Data Sheet							
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006				
		Owner Job No:			Sheet No: 13 of 18				
General Data	1	Tag No.		PCV-3558					
	2	Service		LPS TO PNL V 351					
	3	P&ID No.	Piping Size	Class	Line No	035	1/2"	3CC6 (IA)	3501
	4	Fluid		State		STEAM		Gas	
	5	Pressure rating		Piping material		150#		Carbon Steel	
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara	86%
	7	Area Classification		Area		ZONE 1		300	
process condition	8	Normal Temperature		Unit		135		°C	
	9	Max Temperature		Unit		180		°C	
	10	Normal Pressure		Unit		2.5		barg	
Flow Rate	11	Max Pressure		Unit		6.5		barg	
	12	Max.Continuous		Unit		25		Kg/h	
	13	Min.Continuous		Unit		2.5		Kg/h	
	14	Max.In Transients		Unit		30		Kg/h	
	15	Allow. with closed valve		Unit		0		Kg/h	
Press	16	Norm . Op. upstr. Press		Unit		5.5		barg	
	17	Dp. At max. flowrate		Unit		5		bar	
	18	Max. Dp with closed valve		Unit		6.5		bar	
Temperature	19	Norm . upstr. Temp		Unit		155		°C	
	20	Max . upstr. Temp		Unit		180		°C	
Sp. Gr.	21	Gases vapours		Unit		3.3		Kg/m3	
	22	Liquids		Unit				Kg/m3	
	23	Mol.weight		Unit		18		Kg/Kmol	
Visc.	24	Op. visc. (when>5mpa's)				0.014			
	25	Solid in suspension							
INSTRUMENT	26	Range (SET POINT)		Unit		1 - 3		barg	
	27	Installation				LOCAL			
	28	Pressure increase valve				CLOSES			
Cv	29	Min/Norm/Max		Required		VTA		VTA	
	30	Body type		Body material		Globe		Carbon Steel	
Body	31	Size Body		Port		1/2"		Single	
	32	Design Pressure		Min. Bar a	Max. Bar a			Barg	
	33	Design Temperature		Min. °C	Max. °C			°C	
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV	
	35	Packing mat.		Lubricator		PTFE		VTA	
	36	Flow direction				FTO			
	37	Bonnet type				Standard			
	38	Back Pressure Range				VTA			
	39	D.PRESS (DESIGN)				VTA			
	40	D.TEMP (DESIGN)				VTA			
Trim	41	Plug type		Plug material		Contoured		SS - 316	
	42	Characteristics				Equal Percentage			
	43	Seat Material		Cage/Guide Material		SS - 316		NA	
Actuator	44	Type / Material				Diaphragm/VTA			
	45	Spring range				VTA			
Notes:									
1	0	12/23/2021		IFA		K.A		M.N	
No.	Rev	Date		Status		Prepared		Checked	
								AA.SH	
								Approved	

		PROJECT: PP-PE PILOT PLANT						 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Pressure Regulator Valve Data Sheet							
		Contractor Job No:			Doc. No: 900-DAS-A4-IN-0006				
		Owner Job No:			Sheet No: 16 of 18				
General Data	1	Tag No.		PCV-7159					
	2	Service		LPS TO JACKET PIPE					
	3	P&ID No.	Piping Size	Class	Line No	071	1/2"	3CC6 (IA)	7101
	4	Fluid		State		Steam		Gas	
	5	Pressure rating		Piping material		150#		Carbon Steel	
	6	Amb.Temp	Amb Press	Amb.Rel.Humidity Max		(-20)°C / 50°C		0.82 Bara	86%
	7	Area Classification		Area		ZONE 1		700	
process condition	8	Normal Temperature		Unit		162		°C	
	9	Max Temperature		Unit		180		°C	
	10	Normal Pressure		Unit		5		barg	
Flow Rate	11	Max Pressure		Unit		6		barg	
	12	Max.Continuous		Unit		80		Kg/h	
	13	Min.Continuous		Unit		8		Kg/h	
	14	Max.In Transients		Unit		96		Kg/h	
	15	Allow. with closed valve		Unit		0		Kg/h	
Press	16	Norm . Op. upstr. Press		Unit		5		barg	
	17	Dp. At max. flowrate		Unit		3		bar	
	18	Max. Dp with closed valve		Unit		6		bar	
Temperature	19	Norm . upstr. Temp		Unit		162		°C	
	20	Max . upstr. Temp		Unit		180		°C	
Sp. Gr.	21	Gases vapours		Unit		3.3		Kg/m3	
	22	Liquids		Unit				Kg/m3	
	23	Mol.weight		Unit		18		Kg/Kmol	
Visc.	24	Op. visc. (when>5mpa's)				0.014			
	25	Solid in suspension							
INSTRUMENT	26	Range (SET POINT)		Unit		0 - 2		barg	
	27	Installation				LOCAL			
	28	Pressure increase valve							
Cv	29	Min/Norm/Max		Required		VTA		VTA	
	30	Body type		Body material		Globe		Carbon Steel	
Body	31	Size Body		Port		1/2"		Single	
	32	Design Pressure		Min. Bar a	Max. Bar a			Barg	
	33	Design Temperature		Min. °C	Max. °C			°C	
	34	Valve end con. & rating		Seat leakage class		Flange 150#		ANSI IV	
	35	Packing mat.		Lubricator		PTFE		VTA	
	36	Flow direction				FTO			
	37	Bonnet type				Standard			
	38	Back Pressure Range				VTA			
Trim	39	D.PRESS (DESIGN)				VTA			
	40	D.TEMP (DESIGN)				VTA			
	41	Plug type		Plug material		Contoured		SS - 316	
Actuator	42	Characteristics				Equal Percentage			
	43	Seat Material		Cage/Guide Material		SS - 316		NA	
Actuator	44	Type / Material				Diaphragm/VTA			
	45	Spring range				VTA			
Notes:									
1	0	12/23/2021		IFA		K.A		M.N	
No.	Rev	Date		Status		Prepared		Checked	
								AA.SH	
								Approved	