




شماره صفحه ۱ از ۱۳۴	مشخصات فنی خرید انواع کابل برق و ابزار دقیق برای طرح فاز گازی واحد پلی اتیلن / پلی پروپیلن	 شرکت ملی گاز ایران شرکت پخش و فناوری
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Item	Description	Quantity (m)			Total (m)
		LL	SAZ	Catalyst PP	
Power Cable					
1	Cable without armor size 1*500 mm ² /Class 2 TYPE : CU / PVC / PVC	3000	0	0	3000
2	Cable without armor size 1*300 mm ² /Class 2 TYPE : CU / PVC / PVC	0	1000	500	1500
3	Armored cable size 3*120+70 mm ² /Class 2 TYPE : CU / XLPE / PVC / SWA / PVC	1000	0	0	1000
4	Armored cable size 3*95+50 mm ² /Class 2 TYPE : CU / XLPE / PVC / SWA / PVC	1000	0	0	1000
5	Armored cable size 3*70+35 mm ² /Class 2 TYPE : CU / XLPE / PVC / SWA / PVC	1000	0	0	1000
6	Armored cable size 3*50+35 mm ² /Class 2 TYPE : CU / XLPE / PVC / SWA / PVC	1000	1000	1500	3500
7	Armored cable size 3*35+16 mm ² /Class 2 TYPE : CU / XLPE / PVC / SWA / PVC	1000	1000	1500	3500
8	Armored cable size 3*25+10 mm ² /Class 2 TYPE : CU / XLPE / PVC / SWA / PVC	1000	500	500	2000
9	Armored cable size 4*16 mm ² /Class 2 TYPE : CU / XLPE / PVC / SWA / PVC	1000	500	1500	3000
10	Armored cable size 4*10 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	2000	2000	3000	7000
11	Armored cable size 3*10 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	2000	2000	3000	7000
12	Armored cable size 4*6 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	2000	1000	2000	5000
13	Armored cable size 3*6 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	2000	1000	1500	4500
14	Armored cable size 4*4 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	2500	1500	2000	6000
15	Armored cable size 3*4 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	2500	1500	1500	5500
16	Armored cable size 4*2.5 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	1000	500	500	2000
17	Armored cable size 5*2.5 mm ² /Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	5000	3000	4000	12000

شماره صفحه ۱۳۴ از ۲	مشخصات فنی خرید انواع کابل برق و ابزار دقیق برای طرح فاز گازی واحد پلی اتیلن / پلی پروپیلن	 شرکت ملی گاز ایران شرکت پخش و فناوری
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Item	Description	Quantity (m)			Total (m)
		LL	SAZ	Catalyst PP	
18	Armored cable size 10*2.5 mm ² / Class 5 TYPE : CU / XLPE / PVC / SWA / PVC	8000	6000	6000	20000
Cable earth					
19	Uncoated earth cable size 1*70mm ² / Class2 TYPE : CU	1000	500	500	2000
20	Coated earth cable size 1*95mm ² / Class5 TYPE : CU / PVC	500	500	500	1500
21	Coated earth cable size 1*70mm ² / Class5 TYPE : CU / PVC	500	500	500	1500
22	Coated earth cable size 1*50mm ² / Class5 TYPE : CU / PVC	500	500	500	1500
23	Coated earth cable size 1*35mm ² / Class5 TYPE : CU / PVC	500	500	500	1500
24	Coated earth cable size 1*25mm ² / Class5 TYPE : CU / PVC	500	500	500	1500
25	Coated earth cable size 1*10mm ² / Class5 TYPE : CU / PVC	1000	1000	1000	3000
26	Coated earth cable size 1*6mm ² / Class5 TYPE : CU / PVC	500	500	500	1500
27	Coated earth cable size 1*4mm ² / Class5 TYPE : CU / PVC	200	200	200	600
Cable instrumentation					
28	Multi-core armored cable instrumentation size 20*2*0.75 / class2 TYPE : CU / XLPE / ISCR / OSCR / PVC / SWA / PVC	9000	12000	0	21000
29	Multi-core without armor cable instrumentation size 20*2*0.75 / class2 TYPE : CU / XLPE / OSCR / PVC / PVC	5000	2500	0	7500
30	Armored cable instrumentation size 3*2*0.75 / class2 TYPE : CU / XLPE / ISCR / OSCR / PVC / SWA / PVC	1000	500	0	1500
31	Armored cable instrumentation size 2*2*0.75 / class2 TYPE : CU / XLPE / ISCR / OSCR / PVC / SWA / PVC	1000	500	0	1500
32	Armored cable instrumentation size 1*2*0.75 / class2 TYPE : CU / XLPE / OSCR / PVC / SWA / PVC	8000	3000	0	11000

شماره صفحه ۳ از ۱۳۴	مشخصات فنی خرید انواع کابل برق و ابزار دقیق برای طرح فاز گازی واحد پلی اتیلن / پلی پروپیلن	 شرکت ملی گاز ایران شرکت پژوهش و فناوری
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Item	Description	Quantity (m)			Total (m)
		LL	SAZ	Catalyst PP	
33	Cable without armor instrumentation size 1*2*0.75 / class2 TYPE : CU / XLPE / OSCR / PVC	2000	2000	0	4000
Total (m)		68200	47700	33700	149600

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: Instrument Cable Data Sheet

INSTRUMENT CABLE DATA SHEET

CONTRACTOR:

LICENSOR:

Document No.:

Rev.: 0

Type: DAS

Contract Job No.:

Page A

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: Instrument Cable Data Sheet

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Page A


		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	9000 Meter			
	4	Cable Size	20x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / ISCR / OSCR / PVC / SWA / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	20			
	18	Every Pair Element Diameter	Black-White With numbered			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	0.036 mm			
	20	Tinned Drain Wire Size	0.5 mm2			
Overall Screen	21	Number of Drain Wire	1			
	22	Aluminium Polyester Tape Thickness	0.036 mm			
	23	Polyester Tape Thickness	0.036 mm			
	24	Individual Screened Element Diameter	VTA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1.5 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	1.25 mm			
	35	Polypropylene (PP) Tape Thickness	0.1 mm			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	VTA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.8 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR M32)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
Installation	45	Maximum Mutual Capacitance	150 nf/km			
	46	Maximum Capacitance Between Core to Screen	300 pf/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Environmental	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	9618 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	4*2000 & 1*1000 meter			
Special Properties	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
Jet Printed Marking		(Cable Designation Code) 20 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 2 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	5000 Meter			
	4	Cable Size	20x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / OSCR / PVC / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	20			
	18	Every Pair Element Diameter	Black-White With numbered			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	NA			
	20	Tinned Drain Wire Size	NA			
Overall Screen	21	Number of Drain Wire	NA			
	22	Aluminium Polyester Tape Thickness	NA			
	23	Polyester Tape Thickness	NA			
	24	Individual Screened Element Diameter	NA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1.5 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	NA			
	35	Polypropylene (PP) Tape Thickness	NA			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	VTA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.5 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR M25)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
	45	Maximum Mutual Capacitance	150 nf/km			
	46	Maximum Capacitance Between Core to Screen	300 pf/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Installation	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	9618 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	2*2500 meter			
Environmental	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
Special Properties	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
	57	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) 20 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 3 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	1000 Meter			
	4	Cable Size	3x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / ISCR / OSCR / PVC / SWA / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
	17	Number of Pairs	3			
	18	Every Pair Element Diameter	Black-White With numbered			
Individual Screen	19	Polyester Tape Thickness (2 Layers: ID+SC)	0.036 mm			
	20	Tinned Drain Wire Size (Class 2)	0.5 mm2			
	21	Number of Drain Wire	1			
	22	Aluminium Polyester Tape Thickness	0.036 mm			
Overall Screen	23	Polyester Tape Thickness	0.036 mm			
	24	Individual Screened Element Diameter	VTA			
	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size (Class 2)	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
Inner Sheath	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1 mm			
Armour	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	0.9 mm			
	35	Polypropylene (PP) Tape Thickness	0.1 mm			
	36	Overlap percentage	25 %			
	37	Over Armour+Tape Diameter	VTA			
Outer Sheath	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.4 mm			
Completed Cable	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR A20)			
Electrical	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
	45	Maximum Mutual Capacitance	150 nF/km			
	46	Maximum Capacitance Between Core to Screen	300 pF/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Installation	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	2465 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	1*1000 meter			
Environmental	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
Special Properties	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
	57	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) 3 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 4 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	1000 Meter			
	4	Cable Size	2x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / ISCR / OSCR / PVC / SWA / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	2			
	18	Every Pair Element Diameter	Black-White With numbered			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	0.036 mm			
	20	Tinned Drain Wire Size (Class 2)	0.5 mm2			
Overall Screen	21	Number of Drain Wire	1			
	22	Aluminium Polyester Tape Thickness	0.036 mm			
	23	Polyester Tape Thickness	0.036 mm			
	24	Individual Screened Element Diameter	VTA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size (Class 2)	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	0.9 mm			
	35	Polypropylene (PP) Tape Thickness	0.1 mm			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	VTA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.4 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR O20)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
Installation	45	Maximum Mutual Capacitance	150 nF/km			
	46	Maximum Capacitance Between Core to Screen	300 pF/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Environmental	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	2267 N			
	51	Packing Type	Metal Drum			
	52	Cable Catting	1*1000 meter			
Special Properties	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
Jet Printed Marking		(Cable Designation Code) 2 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 5 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	8000 Meter			
	4	Cable Size	1x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / OSCR / PVC / SWA / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cross Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	1			
	18	Every Pair Element Diameter	Black-White			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	NA			
	20	Tinned Drain Wire Size	NA			
Overall Screen	21	Number of Drain Wire	NA			
	22	Aluminium Polyester Tape Thickness	NA			
	23	Polyester Tape Thickness	NA			
	24	Individual Screened Element Diameter	NA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	0.9 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	0.9 mm			
	35	Polypropylene (PP) Tape Thickness	0.1 mm			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	VTA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.3 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR O20)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
Installation	45	Maximum Mutual Capacitance	150 nF/km			
	46	Maximum Capacitance Between Core to Screen	300 pF/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °C			
Environmental	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	1133 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	4*2000 meter			
Special Properties	53	Ambient Temperature	Min -20 °C , Max 90 °C			
	54	Minimum Temperature During Installation	-5 °C			
	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
Jet Printed Marking		(Cable Designation Code) 1 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 6 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	2000 Meter			
	4	Cable Size	1x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / OSCR / PVC / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	1			
	18	Every Pair Element Diameter	Black-White			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	NA			
	20	Tinned Drain Wire Size (Class 2)	NA			
Overall Screen	21	Number of Drain Wire	NA			
	22	Aluminium Polyester Tape Thickness	NA			
	23	Polyester Tape Thickness	NA			
	24	Individual Screened Element Diameter	NA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size (Class 2)	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1.5 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	NA			
	35	Polypropylene (PP) Tape Thickness	NA			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	NA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.3 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR O20)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
Installation	45	Maximum Mutual Capacitance	150 nF/km			
	46	Maximum Capacitance Between Core to Screen	300 pF/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Environmental	49	Minimum Bending Radius	392 mm			
	50	Maximum Pulling Tension	1133 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	1*2000 meter			
Special Properties	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
Jet Printed Marking		(Cable Designation Code) 1 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLPDE)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: ERTING Cable Data Sheet

ERTING CABLE DATA SHEET

CONTRACTOR:

LICENSOR:


Document No.:


Rev.: 0


Type: DAS


Contract Job No.:


Page A


		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x70 mm ²			
	5	Cable Type	Stranded Bare Wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu2			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60228			
Common Features	10	Conductor(s) Type And Material	Stranded (Class 2) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	70 mm ²			
	14	Number of Conductor wires	1*2.125 mm			
	15	Diameter of Conductor wires	10.63 mm			
	16	Nominal Thickness of Phase Insulation	2.4 mm			
	17	Insulation Material				
	18	Over Phase Insulation Diameter				
	19	Color of Phase				
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	106 mm			
	24	Completed Cable Approximate Weight	619 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.268 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage				
	30	Insulation Resistance Constant Ki in Normal Operation				
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath				
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath				
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	Metal Drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature				
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 70 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	


		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 2 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x95 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage	450/750 V			
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	95 mm2			
	14	Number of Conductor wires	461 x 0.485 mm			
	15	Diameter of Conductor wires	13.3 mm			
	16	Nominal Thickness of Phase Insulation	1.6 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	16.5 mm			
Outer Sheath	19	Color of Phase	Y/G			
	20	Sheath Material				
	21	Sheath Color				
Completed Cable	22	Sheath Thickness				
	23	Completed Cable Approximate Diameter	16.5 mm			
Electrical	24	Completed Cable Approximate Weight	936 kg/km			
	25	Maximum Resistance of Phase Conductor at 20 °C	0.206 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0032 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
Environmental	36	Cable Cutting	1*500 meter			
	37	Ambient Temperature	min -20 °c , max 70 °c			
Special Properties	38	Minimum Temperature During Installation	-5 °c			
	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 95 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 3 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x70 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	70 mm2			
	14	Number of Conductor wires	576 x 0.382 mm			
	15	Diameter of Conductor wires	11.8 mm			
	16	Nominal Thickness of Phase Insulation	1.4 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	14.6 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	14.6 mm			
	24	Completed Cable Approximate Weight	718 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.272 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0032 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 70 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 4 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x50 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cruss Section	50 mm2			
	14	Number of Conductor wires	402 x 0.382 mm			
	15	Diameter of Conductor wires	9.6 mm			
	16	Nominal Thickness of Phase Insulation	1.4 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	12.4 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	12.4 mm			
	24	Completed Cable Approximate Weight	515 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.386 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0037 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 50 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
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		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 5 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x35 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	35 mm2			
	14	Number of Conductor wires	288 x 0.382 mm			
	15	Diameter of Conductor wires	8.1 mm			
	16	Nominal Thickness of Phase Insulation	1.2 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	10.5 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	10.5 mm			
	24	Completed Cable Approximate Weight	364 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.554 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0038 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 35 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
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		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 6 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x25 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	25 mm2			
	14	Number of Conductor wires	197 x 0.382 mm			
	15	Diameter of Conductor wires	6.61 mm			
	16	Nominal Thickness of Phase Insulation	1.2 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	9 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	9 mm			
	24	Completed Cable Approximate Weight	278 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.78 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0044 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 25 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 7 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x10 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	10 mm2			
	14	Number of Conductor wires	81 x 0.382 mm			
	15	Diameter of Conductor wires	4.12 mm			
	16	Nominal Thickness of Phase Insulation	1 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	6.17 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	6.2 mm			
	24	Completed Cable Approximate Weight	117 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	1.91 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0056MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x10 mm² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 8 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x6 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material		Flexibele (Class 5) Round Annealed Copper		
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core		1		
	13	Conductor Cross Section		6 mm2		
	14	Number of Conductor wires		85 x 0.282 mm		
	15	Diameter of Conductor wires		3.02 mm		
	16	Nominal Thickness of Phase Insulation		0.8 mm		
	17	Insulation Material		PVC 70 °c		
	18	Over Phase Insulation Diameter		4.8 mm		
	19	Color of Phase		Y/G		
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter		4.8 mm		
	24	Completed Cable Approximate Weight		66 kg/km		
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C		3.3 Ω/Km		
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage		2500 V		
	30	Minimum Insulation Resistance at 70 °C		0.006MΩ.Km		
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - ----- n/mm2		
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath		125 - ----- %		
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type		wooden drum		
	36	Cable Cutting		1*500 meter		
Environmental	37	Ambient Temperature		min -20 °c , max 70 °c		
	38	Minimum Temperature During Installation		-5 °c		
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 6 mm² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (LLPDE)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 9 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	200 Meter			
	4	Cable Size	1x4 mm ²			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	4 mm ²			
	14	Number of Conductor wires	85 x 0.282 mm			
	15	Diameter of Conductor wires	3.02 mm			
	16	Nominal Thickness of Phase Insulation	0.8 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	4.8 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	4.8 mm			
	24	Completed Cable Approximate Weight	66 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	3.3 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.006MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm ²			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*200 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 4 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: Electrical Cable Data Sheet

ELECTRICAL CABLE DATA SHEET

CONTRACTOR:

LICENSOR:

Document No.:

Rev.: 0

Type: DAS

Contract Job No.:

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PROJECT: Low Linear Density Poly Ethylene (LLDPE)


CLIENT:





شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی


TITLE: Electrical Cable Data Sheet


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Document Revision																				
CONTRACTOR:			LICENSOR:															Rev.: 0		
								Document No.:										Type: DAS		
								Contract Job No.:										Page B		


		PROJECT: Low Linear Density Poly Ethylene (LLDPE)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic Power			
	3	Quantity	3000 Meter			
	4	Cable Size	1x500 rm , mm2			
	5	Cable Type	Flame Retardant Power Cable			
	6	Cable Designation Code	NYY			
	7	Cable Structure	Cu2 / PVC / PVC			
	8	Rated Voltage	0.6 / 1 (1.2) kV			
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1			
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material		PVC 70°C		
Conductor And Insulation	12	Number of Core		1		
	13	Conductor Cross Section		500 mm2		
	14	Number of Conductor wires		61		
	15	Diameter of Conductor wires		3.9 mm2		
	16	Nominal Thickness of Phase Insulation		2.4 mm		
	17	Insulation Material		PVC		
	18	Over Phase Insulation Diameter		VTA		
Outer Sheath	19	Color of Phase		Black		
	20	Sheath Material		PVC 70°C (ST1)		
	21	Sheath Color		Black		
Completed Cable	22	Sheath Thickness		1.7 mm		
	23	Completed Cable Approximate Diameter		VTA		
Electrical	24	Completed Cable Approximate Weight		VTA		
	25	Maximum Resistance of Phase Conductor at 20 °C		0.0366 Ω/Km		
	26	Maximum Conductor Temperature-Normal Operation		70 °C		
	27	Maximum Conductor Temperature-Short Circuit		160 °C		
	28	Maximum Short-Circuit Current at 1 Second		50.0 kA		
	29	Power Frequency (AC) Test Voltage		5.0 kV		
	30	Insulation Resistance Constant Ki in Normal Operation		0.037 MΩ/km		
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2		
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath		150 - 150 %		
Installation	33	Minimum Bending Radius		VTA		
	34	Maximum Pulling Tension		VTA		
	35	Packing Type		Metal Drum		
Environmental	36	Cable Cutting		2*1500 meter		
	37	Ambient Temperature		Min -20 °C , Max 90 °C		
	38	Minimum Temperature During Installation		-5 °C		
Special Properties	39	Fire Resistant (IEC 60331-21)		NO		
	40	Flame Retardant (IEC 60332-1)		YES		
	41	UV Resistant (UL 1581, Section 1200)		YES		
	42	Jacket properties		Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) NYY 1 X 500 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
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		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service	Electronic Power		
	3	Quantity	1000 Meter		
	4	Cable Size	3*120+70		
	5	Cable Type	Flame Retardant Power Cable		
	6	Cable Designation Code	N2XRY		
	7	Cable Structure	Cu2 / XLPE / PVC / SWA / PVC		
	8	Rated Voltage	0.6 / 1 (1.2) kV		
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1		
Common Features	10	Conductor(s) Type And Material	Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material	XLPE		
Phase Conductor And Insulation	12	Number of Phase	3		
	13	Conductor Cruss Section Phase	70 mm ²		
	14	Number of Conductor wires Phase	19		
	15	Diameter of Conductor wires Phase	2.125 mm ²		
	16	Round Phase Conductor Diameter	10.63 mm		
	17	Nominal Thickness of Phase Insulation	1.1 mm		
	18	Over Phase Insulation Diameter	VTA		
Neutral Conductor And Insulation	19	Color of Phase	Black - Red - Brown		
	20	Number of Neutral	1		
	21	Conductor Cruss Section Neutral	35 mm ²		
	22	Number of Conductor wires Neutral	7		
	23	Diameter of Conductor wires Neutral	2.485 mm ²		
	24	Round Neutral Conductor Diameter	7.46 mm		
	25	Nominal Thickness of Neutral Insulation	0.9 mm		
Inner Covering	26	Over Neutral Insulation Diameter	VTA		
	27	Color of Neutral	Blue		
	28	Inner Covering Type	Extruded Bedding		
	29	Extruded Bedding Material	PVC		
Armour	30	Extruded Bedding Thickness	1.2 mm		
	31	Over Inner Covering Diameter	VTA		
	32	Under Galvanized Steel Wire Armour Diameter	VTA		
	33	Steel Wire Armours Diameter	2 mm		
	34	Polypropylene (PP) Tape Thickness	0.2 mm		
	35	Overlap percentage	35 %		
	36	Over Single Wire Armour+Tape Diameter	VTA		
Outer Sheath	37	Sheath Material	PVC 90°c (ST2)		
	38	Sheath Color	Black		
	39	Sheath Thickness	1.9 mm		
Completed Cable	40	Completed Cable Approximate Diameter	VTA		
	41	Completed Cable Approximate Weight	VTA		
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C	0.268 Ω/Km		
	43	Maximum Resistance of Neutral Conductor at 20 °C	0.524 Ω/Km		
	44	Maximum Conductor Temperature-Normal Operation	90 °c		
	45	Maximum Conductor Temperature-Short Circuit	250 °c		
	46	Maximum Short-Circuit Current at 1 Second	10.02 kA		
	47	Power Frequency (AC) Test Voltage	3.5 kV		
	48	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km		
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm ²		
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %		
Installation	51	Minimum Bending Radius	VTA		
	52	Maximum Pulling Tension	13971 N		
	53	Packing Type	Metal Drum		
	54	Cable Cutting	1*1000 Meter		
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c		
	56	Minimum Temperature During Installation	-5 °c		
Special Properties	57	Fire Resistant (IEC 60331-21)	NO		
	58	Flame Retardant (IEC 60332-1)	YES		
	59	UV Resistant (UL 1581, Section 1200)	YES		
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 120 mm / 70 mm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
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		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service	Electronic Power		
	3	Quantity	1000 Meter		
	4	Cable Size	3*95+50		
	5	Cable Type	Flame Retardant Power Cable		
	6	Cable Designation Code	N2XRY		
	7	Cable Structure	Cu2 / XLPE / PVC / SWA / PVC		
	8	Rated Voltage	0.6 / 1 (1.2) kV		
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1		
Common Features	10	Conductor(s) Type And Material	Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material	XLPE		
Phase Conductor And Insulation	12	Number of Phase	3		
	13	Conductor Cruss Section Phase	70 mm ²		
	14	Number of Conductor wires Phase	19		
	15	Diameter of Conductor wires Phase	2.125 mm ²		
	16	Round Phase Conductor Diameter	10.63 mm		
	17	Nominal Thickness of Phase Insulation	1.1 mm		
	18	Over Phase Insulation Diameter	VTA		
Neutral Conductor And Insulation	19	Color of Phase	Black - Red - Brown		
	20	Number of Neutral	1		
	21	Conductor Cruss Section Neutral	35 mm ²		
	22	Number of Conductor wires Neutral	7		
	23	Diameter of Conductor wires Neutral	2.485 mm ²		
	24	Round Neutral Conductor Diameter	7.46 mm		
	25	Nominal Thickness of Neutral Insulation	0.9 mm		
Inner Covering	26	Over Neutral Insulation Diameter	VTA		
	27	Color of Neutral	Blue		
	28	Inner Covering Type	Extruded Bedding		
	29	Extruded Bedding Material	PVC		
Armour	30	Extruded Bedding Thickness	1.2 mm		
	31	Over Inner Covering Diameter	VTA		
	32	Under Galvanized Steel Wire Armour Diameter	VTA		
	33	Steel Wire Armours Diameter	2 mm		
	34	Polypropylene (PP) Tape Thickness	0.2 mm		
	35	Overlap percentage	35 %		
	36	Over Single Wire Armour+Tape Diameter	VTA		
Outer Sheath	37	Sheath Material	PVC 90°c (ST2)		
	38	Sheath Color	Black		
	39	Sheath Thickness	1.9 mm		
Completed Cable	40	Completed Cable Approximate Diameter	VTA		
	41	Completed Cable Approximate Weight	VTA		
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C	0.268 Ω/Km		
	43	Maximum Resistance of Neutral Conductor at 20 °C	0.524 Ω/Km		
	44	Maximum Conductor Temperature-Normal Operation	90 °c		
	45	Maximum Conductor Temperature-Short Circuit	250 °c		
	46	Maximum Short-Circuit Current at 1 Second	10.02 kA		
	47	Power Frequency (AC) Test Voltage	3.5 kV		
	48	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km		
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm ²		
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %		
Installation	51	Minimum Bending Radius	VTA		
	52	Maximum Pulling Tension	13971 N		
	53	Packing Type	Metal Drum		
	54	Cable Cutting	1*1000 Meter		
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c		
	56	Minimum Temperature During Installation	-5 °c		
Special Properties	57	Fire Resistant (IEC 60331-21)	NO		
	58	Flame Retardant (IEC 60332-1)	YES		
	59	UV Resistant (UL 1581, Section 1200)	YES		
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 95 rm / 50 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
					Approved

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet				
		Contractor Job No:		Doc. No:		
		Owner Job No:		Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic Power			
	3	Quantity	1000 Meter			
	4	Cable Size	3 x 70 rm + 35 rm , mm2			
	5	Cable Type	Flame Retardant Power Cable			
	6	Cable Designation Code	N2XRY			
	7	Cable Structure	Cu2 / XLPE / PVC / SWA / PVC			
	8	Rated Voltage	0.6 / 1 (1.2) kV			
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1			
Common Features	10	Conductor(s) Type And Material	Stranded (Class 2) Round Annealed Copper			
	11	Insulation(s) Material	XLPE			
Phase Conductor And Insulation	12	Number of Phase	3			
	13	Conductor Cruss Section Phase	70 mm2			
	14	Number of Conductor wires Phase	19			
	15	Diameter of Conductor wires Phase	2.125 mm2			
	16	Round Phase Conductor Diameter	10.63 mm			
	17	Nominal Thickness of Phase Insulation	1.1 mm			
	18	Over Phase Insulation Diameter	VTA			
Neutral Conductor And Insulation	19	Color of Phase	Black - Red - Brown			
	20	Number of Neutral	1			
	21	Conductor Cruss Section Neutral	35 mm2			
	22	Number of Conductor wires Neutral	7			
	23	Diameter of Conductor wires Neutral	2.485 mm2			
	24	Round Neutral Conductor Diameter	7.46 mm			
	25	Nominal Thickness of Neutral Insulation	0.9 mm			
Inner Covering	26	Over Neutral Insulation Diameter	VTA			
	27	Color of Neutral	Blue			
	28	Inner Covering Type	Extruded Bedding			
	29	Extruded Bedding Material	PVC			
Armour	30	Extruded Bedding Thickness	1.2 mm			
	31	Over Inner Covering Diameter	VTA			
	32	Under Galvanized Steel Wire Armour Diameter	VTA			
	33	Steel Wire Armours Diameter	2 mm			
	34	Polypropylene (PP) Tape Thickness	0.2 mm			
	35	Overlap percentage	35 %			
Outer Sheath	36	Over Single Wire Armour+Tape Diameter	VTA			
	37	Sheath Material	PVC 90°c (ST2)			
	38	Sheath Color	Black			
Completed Cable	39	Sheath Thickness	1.9 mm			
	40	Completed Cable Approximate Diameter	VTA			
	41	Completed Cable Approximate Weight	VTA			
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C	0.268 Ω/Km			
	43	Maximum Resistance of Neutral Conductor at 20 °C	0.524 Ω/Km			
	44	Maximum Conductor Temperature-Normal Operation	90 °c			
	45	Maximum Conductor Temperature-Short Circuit	250 °c			
	46	Maximum Short-Circuit Current at 1 Second	10.02 kA			
	47	Power Frequency (AC) Test Voltage	3.5 kV			
Mechanical	48	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km			
	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	13971 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 70 rm / 35 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
Approved						

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
Contractor Job No:		Doc. No:			
		Owner Job No:		Sheet No 1 of 6	
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1000 Meter	
	4	Cable Size		3 x 50 rm + 25 rm , mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		50 mm2	
	14	Number of Conductor wires Phase		7	
	15	Diameter of Conductor wires Phase		2.97 mm2	
	16	Round Phase Conductor Diameter		8.5 mm	
	17	Nominal Thickness of Phase Insulation		1 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		25 mm2	
	22	Number of Conductor wires Neutral		7	
	23	Diameter of Conductor wires Neutral		2.095 mm2	
	24	Round Neutral Conductor Diameter		6.28 mm	
	25	Nominal Thickness of Neutral Insulation		0.9 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armour Diameter		1.6 mm	
	34	Polypropylene (PP) Tape Thickness		0.2 mm	
	35	Overlap percentage		35 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.7 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		0.387 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		0.727 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		7.15 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2	
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath		200 - 150 %	
Installation	51	Minimum Bending Radius		VTA	
	52	Maximum Pulling Tension		9506 N	
	53	Packing Type		Metal Drum	
	54	Cable Cutting		1*1000 Meter	
Environmental	55	Ambient Temperature		Min -20 °c , Max 90 °c	
	56	Minimum Temperature During Installation		-5 °c	
Special Properties	57	Fire Resistant (IEC 60331-21)		NO	
	58	Flame Retardant (IEC 60332-1)		YES	
	59	UV Resistant (UL 1581, Section 1200)		YES	
	60	Jacket properties		Flame retardant; Abrasion resistant; Oil proof	
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 50 rm / 25 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
					Approved

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet				
		Contractor Job No:		Doc. No:		
		Owner Job No:		Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service		Electronic Power		
	3	Quantity		1000 Meter		
	4	Cable Size		3 x 35 rm + 16 rm , mm2		
	5	Cable Type		Flame Retardant Power Cable		
	6	Cable Designation Code		N2XRY		
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC		
	8	Rated Voltage		0.6 / 1 (1.2) kV		
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1		
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material		XLPE		
Phase Conductor And Insulation	12	Number of Phase		3		
	13	Conductor Cruss Section Phase		35 mm2		
	14	Number of Conductor wires Phase		7		
	15	Diameter of Conductor wires Phase		2.485 mm2		
	16	Round Phase Conductor Diameter		VTA		
	17	Nominal Thickness of Phase Insulation		0.9 mm		
	18	Over Phase Insulation Diameter		VTA		
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown		
	20	Number of Neutral		1		
	21	Conductor Cruss Section Neutral		16 mm2		
	22	Number of Conductor wires Neutral		7		
	23	Diameter of Conductor wires Neutral		1.705 mm2		
	24	Round Neutral Conductor Diameter		VTA		
	25	Nominal Thickness of Neutral Insulation		0.7 mm		
Inner Covering	26	Over Neutral Insulation Diameter		VTA		
	27	Color of Neutral		Blue		
	28	Inner Covering Type		Extruded Bedding		
	29	Extruded Bedding Material		PVC		
	30	Extruded Bedding Thickness		1 mm		
Armour	31	Over Inner Covering Diameter		VTA		
	32	Under Galvanized Steel Wire Armour Diameter		VTA		
	33	Steel Wire Armour Diameter		1.6 mm		
	34	Polypropylene (PP) Tape Thickness		0.2 mm		
	35	Overlap percentage		35 %		
	36	Over Single Wire Armour+Tape Diameter		VTA		
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)		
	38	Sheath Color		Black		
	39	Sheath Thickness		1.6 mm		
Completed Cable	40	Completed Cable Approximate Diameter		VTA		
	41	Completed Cable Approximate Weight		VTA		
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		0.524 Ω/Km		
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.15 Ω/Km		
	44	Maximum Conductor Temperature-Normal Operation		90 °c		
	45	Maximum Conductor Temperature-Short Circuit		250 °c		
	46	Maximum Short-Circuit Current at 1 Second		5.01 kA		
	47	Power Frequency (AC) Test Voltage		3.5 kV		
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km		
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2		
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath		200 - 150 %		
Installation	51	Minimum Bending Radius		VTA		
	52	Maximum Pulling Tension		7832 N		
	53	Packing Type		Metal Drum		
	54	Cable Cutting		1000 Meter		
Environmental	55	Ambient Temperature		Min -20 °c , Max 90 °c		
	56	Minimum Temperature During Installation		-5 °c		
Special Properties	57	Fire Resistant (IEC 60331-21)		NO		
	58	Flame Retardant (IEC 60332-1)		YES		
	59	UV Resistant (UL 1581, Section 1200)		YES		
	60	Jacket properties		Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 35 rm / 16 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:		Doc. No:	
		Owner Job No:		Sheet No 1 of 6	
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1000 Meter	
	4	Cable Size		3 x 25 rm + 10 rm , mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		25 mm2	
	14	Number of Conductor wires Phase		7	
	15	Diameter of Conductor wires Phase		2.094 mm2	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.9 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		16 mm2	
	22	Number of Conductor wires Neutral		7	
	23	Diameter of Conductor wires Neutral		1.705 mm2	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.6 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°C (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		0.727 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.15 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		3.58 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2	
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath		200 - 150 %	
Installation	51	Minimum Bending Radius		VTA	
	52	Maximum Pulling Tension		6708 N	
	53	Packing Type		Metal Drum	
	54	Cable Cutting		1*1000 Meter	
Environmental	55	Ambient Temperature		Min -20 °c , Max 90 °c	
	56	Minimum Temperature During Installation		-5 °c	
Special Properties	57	Fire Resistant (IEC 60331-21)		NO	
	58	Flame Retardant (IEC 60332-1)		YES	
	59	UV Resistant (UL 1581, Section 1200)		YES	
	60	Jacket properties		Flame retardant; Abrasion resistant; Oil proof	
Jet Printed Marking	(Cable Designation Code) N2XRY 3 X 25 rm / 16 rm mm² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note	Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
					Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1000 Meter	
	4	Cable Size		4 x 16 mm , mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		16 mm2	
	14	Number of Conductor wires Phase		7	
	15	Diameter of Conductor wires Phase		1.705 mm2	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		16 mm2	
	22	Number of Conductor wires Neutral		7	
	23	Diameter of Conductor wires Neutral		1.705 mm2	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.6 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.15 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.15 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		2.29 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	5358 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 16 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2000 Meter	
	4	Cable Size		4 x 10 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		10 mm ²	
	14	Number of Conductor wires Phase		81	
	15	Diameter of Conductor wires Phase		0.382 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		10 mm ²	
	22	Number of Conductor wires Neutral		81	
	23	Diameter of Conductor wires Neutral		0.382 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.91 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.91 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		1.43 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	4083 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 10 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2000 Meter	
	4	Cable Size		3 x 10 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		10 mm ²	
	14	Number of Conductor wires Phase		81	
	15	Diameter of Conductor wires Phase		0.382 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
Inner Covering	26	Over Neutral Insulation Diameter		NA	
	27	Color of Neutral		NA	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.91 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		1.43 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	3564 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 10 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2000 Meter	
	4	Cable Size		4 x 6 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		6 mm ²	
	14	Number of Conductor wires Phase		85	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		6 mm ²	
	22	Number of Conductor wires Neutral		85	
	23	Diameter of Conductor wires Neutral		0.282 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		3.3 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		3.3 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	3114 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 Metre			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 6 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2500 Meter	
	4	Cable Size		3 x 6 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		6 mm ²	
	14	Number of Conductor wires Phase		85	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°C (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		3.3 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °C	
	45	Maximum Conductor Temperature-Short Circuit		250 °C	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2540 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2500 Metre			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 6 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2500 Meter	
	4	Cable Size		4 x 4 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		4 mm ²	
	14	Number of Conductor wires Phase		56	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		4 mm ²	
	22	Number of Conductor wires Neutral		56	
	23	Diameter of Conductor wires Neutral		0.282 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		4.95 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		4.95 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.57 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2510 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 4 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2500 Meter	
	4	Cable Size		3 x 4 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		4 mm ²	
	14	Number of Conductor wires Phase		56	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°C (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		4.95 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °C	
	45	Maximum Conductor Temperature-Short Circuit		250 °C	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2218 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 4 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:


Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1000 Meter	
	4	Cable Size		4 x 2.5 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		2.5 mm ²	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		2.5 mm ²	
	22	Number of Conductor wires Neutral		52	
	23	Diameter of Conductor wires Neutral		0.232 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		7.98 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.36 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2450 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (LLDPE)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		5000 Meter	
	4	Cable Size		5 x 2.5 mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY-J	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		2.5 mm2	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm2	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		2.5 mm2	
	22	Number of Conductor wires Neutral		52	
	23	Diameter of Conductor wires Neutral		0.232 mm2	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Earth Conductor And Insulation	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Number of Earth		1	
	29	Conductor Cruss Section Earth		2.5 mm2	
	30	Number of Conductor wires Earth		52	
	31	Diameter of Conductor wires Earth		0.232 mm2	
	32	Round Earth Conductor Diameter		VTA	
Inner Covering	33	Nominal Thickness of Earth Insulation		0.7 mm	
	34	Over Earth Insulation Diameter		VTA	
	35	Color of Earth		Yellow / Green	
	36	Inner Covering Type		Extruded Bedding	
	37	Extruded Bedding Material		PVC	
	38	Extruded Bedding Thickness		1 mm	
	39	Over Inner Covering Diameter		VTA	
Armour	40	Under Galvanized Steel Wire Armour Diameter		VTA	
	41	Steel Wire Armours Diameter		0.9 mm	
	42	Polypropylene (PP) Tape Thickness		0.1 mm	
	43	Overlap percentage		25 %	
	44	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	45	Sheath Material		PVC 90°c (ST2)	
	46	Sheath Color		Black	
	47	Sheath Thickness		1.6 mm	
Completed Cable	48	Completed Cable Approximate Diameter		VTA	
	49	Completed Cable Approximate Weight		VTA	
	50	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	51	Maximum Resistance of Neutral Conductor at 20 °C		7.98 Ω/Km	
	52	Maximum Resistance of Earth Conductor at 20 °C		7.98 Ω/Km	

Electrical	53	Maximum Conductor Temperature-Normal Operation	90 °c
	54	Maximum Conductor Temperature-Short Circuit	250 °c
	55	Maximum Short-Circuit Current at 1 Second	0.36 kA
	56	Power Frequency (AC) Test Voltage	3.5 kV
	57	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km
Mechanical	58	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2
	59	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %
Installation	60	Minimum Bending Radius	VTA
	61	Maximum Pulling Tension	2450 N
	62	Packing Type	Metal Drum
	63	Cable Cutting	2*2500 Meter
Environmental	64	Ambient Temperature	Min -20 °c , Max 90 °c
	65	Minimum Temperature During Installation	-5 °c
Special Properties	66	Fire Resistant (IEC 60331-21)	NO
	67	Flame Retardant (IEC 60332-1)	YES
	68	UV Resistant (UL 1581, Section 1200)	YES
	69	Jacket properties	Flame retardant; Abrasion resistant; Oil proof
Jet Printed Marking		(Cable Designation Code) N2XRY-J 5 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n	
Note		Production Tolerance. (± 5%)	
1	0	2022-01-24	IFA M . A GH . K
No.	Rev	Date	Status Prepared Checked Approved

PROJECT: Low Linear Density Poly Ethylene (LLDPE)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:


Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		8000 Meter	
	4	Cable Size		10 x 2.5 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		10	
	13	Conductor Cross Section Phase		2.5 mm ²	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black with White Number		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.36 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	4238 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	4*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 10 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)	CLIENT: 
TITLE: ERTING Cable Data Sheet	شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی

ERTING CABLE DATA SHEET

CONTRACTOR:	LICENSOR:	Document No.:	Rev.: 0
		Contract Job No.:	Type: DAS
			Page A

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی


TITLE: Electrical Cable Data Sheet


REV. PAGE	0	1	2	3	4	5	REV. PAGE	0	1	2	3	4	5	REV. PAGE	0	1	2	3	4	5
A	X																			
B	X																			
1	X																			
2	X																			
3	X																			
4	X																			
5	X																			
6	X																			
7	X																			
8	X																			
9	X																			


Rev.	Date	Prepared By	Checked By	Approved By	Status
0	2022-01-24	M . A	GH . K		IFA


Document Revision


CONTRACTOR:	LICENSOR:	Document No.:	Rev.: 0
		Contract Job No.:	Type: DAS
			Page B


		PROJECT: Low Linear Density Poly Ethylene (CALALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service		ERTING Power		
	3	Quantity		500 Meter		
	4	Cable Size		1x70 mm ²		
	5	Cable Type		Stranded Bare Wire		
	6	Cable Designation Code				
	7	Cable Structure		Cu2		
	8	Rated Voltage				
	9	Applied Standard (s)		IEC 60228		
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core		1		
	13	Conductor Cross Section		70 mm ²		
	14	Number of Conductor wires		1*2.125 mm		
	15	Diameter of Conductor wires		10.63 mm		
	16	Nominal Thickness of Phase Insulation		2.4 mm		
	17	Insulation Material				
	18	Over Phase Insulation Diameter				
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter		106 mm		
	24	Completed Cable Approximate Weight		619 kg/km		
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C		0.268 Ω/Km		
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage				
Mechanical	30	Insulation Resistance Constant Ki in Normal Operation				
	31	Minimum Tensile Strength of Insulation - Outer Sheath				
Installation	32	Minimum Elongation-at-Break of Insulation - Outer Sheath				
	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type		Metal Drum		
Environmental	36	Cable Cutting		1*500 meter		
	37	Ambient Temperature				
Special Properties	38	Minimum Temperature During Installation		-5 °c		
	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 70 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	


		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: ERTING Cable Data Sheet					
		Contractor Job No:		Doc. No:			
		Owner Job No:		Sheet No 2 of 9			
General Information	1	Cable Code	Manufacturer				
	2	Cable Service		ERTING Power			
	3	Quantity		500 Meter			
	4	Cable Size		1x95 mm ²			
	5	Cable Type		Flame Retardant flexible wire			
	6	Cable Designation Code					
	7	Cable Structure		Cu5/pvc			
	8	Rated Voltage		450/750 V			
	9	Applied Standard (s)		IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material		Flexible (Class 5) Round Annealed Copper			
	11	Insulation(s) Material					
Conductor And Insulation	12	Number of Core		1			
	13	Conductor Cruss Section		95 mm ²			
	14	Number of Conductor wires		461 x 0.485 mm			
	15	Diameter of Conductor wires		13.3 mm			
	16	Nominal Thickness of Phase Insulation		1.6 mm			
	17	Insulation Material		PVC 70 °c			
	18	Over Phase Insulation Diameter		16.5 mm			
	19	Color of Phase		Y/G			
	20	Sheath Material					
Outer Sheath	21	Sheath Color					
	22	Sheath Thickness					
Completed Cable	23	Completed Cable Approximate Diameter		16.5 mm			
	24	Completed Cable Approximate Weight		936 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C		0.206 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation					
	27	Maximum Conductor Temperature-Short Circuit					
	28	Maximum Short-Circuit Current at 1 Second					
Mechanical	29	Power Frequency (AC) Test Voltage		2500 V			
	30	Minimum Insulation Resistance at 70 °C		0.0032 MΩ.Km			
	31	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - ----- n/mm ²			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath		125 - ----- %			
Installation	33	Minimum Bending Radius					
	34	Maximum Pulling Tension					
	35	Packing Type		wooden drum			
Environmental	36	Cable Cutting		1*500 meter			
	37	Ambient Temperature		min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation		-5 °c			
	39	Fire Resistant (IEC 60331-21)					
Special Properties	40	Flame Retardant (IEC 60332-1)					
	41	UV Resistant (UL 1581, Section 1200)					
	42	Jacket properties					
Jet Printed Marking		(Cable Designation Code) 1 x 95 mm ² 450/750 ISIRI (670)02 IRAN n Meter n					
Note		Production Tolerance. (± 5%)					
1	0	2022-01-24	IFA	M . A	GH . K		
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		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 3 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x70 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	70 mm2			
	14	Number of Conductor wires	576 x 0.382 mm			
	15	Diameter of Conductor wires	11.8 mm			
	16	Nominal Thickness of Phase Insulation	1.4 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	14.6 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	14.6 mm			
	24	Completed Cable Approximate Weight	718 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.272 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0032 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 70 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 4 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x50 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	50 mm2			
	14	Number of Conductor wires	402 x 0.382 mm			
	15	Diameter of Conductor wires	9.6 mm			
	16	Nominal Thickness of Phase Insulation	1.4 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	12.4 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	12.4 mm			
	24	Completed Cable Approximate Weight	515 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.386 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0037 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 50 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 5 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x35 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	35 mm2			
	14	Number of Conductor wires	288 x 0.382 mm			
	15	Diameter of Conductor wires	8.1 mm			
	16	Nominal Thickness of Phase Insulation	1.2 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	10.5 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	10.5 mm			
	24	Completed Cable Approximate Weight	364 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.554 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0038 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 35 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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					Approved	

		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 6 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x25 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	25 mm2			
	14	Number of Conductor wires	197 x 0.382 mm			
	15	Diameter of Conductor wires	6.61 mm			
	16	Nominal Thickness of Phase Insulation	1.2 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	9 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	9 mm			
	24	Completed Cable Approximate Weight	278 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.78 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0044 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 25 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	

		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 7 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x10 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	10 mm2			
	14	Number of Conductor wires	81 x 0.382 mm			
	15	Diameter of Conductor wires	4.12 mm			
	16	Nominal Thickness of Phase Insulation	1 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	6.17 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	6.2 mm			
	24	Completed Cable Approximate Weight	117 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	1.91 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0056MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x10 mm² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	

		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 8 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x6 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	6 mm2			
	14	Number of Conductor wires	85 x 0.282 mm			
	15	Diameter of Conductor wires	3.02 mm			
	16	Nominal Thickness of Phase Insulation	0.8 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	4.8 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	4.8 mm			
	24	Completed Cable Approximate Weight	66 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	3.3 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.006MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 6 mm² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 9 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	200 Meter			
	4	Cable Size	1x4 mm ²			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	4 mm ²			
	14	Number of Conductor wires	85 x 0.282 mm			
	15	Diameter of Conductor wires	3.02 mm			
	16	Nominal Thickness of Phase Insulation	0.8 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	4.8 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	4.8 mm			
	24	Completed Cable Approximate Weight	66 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	3.3 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.006MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm ²			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*200 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 4 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)	CLIENT: 
TITLE: Electrical Cable Data Sheet	شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی

ELECTRICAL CABLE DATA SHEET

CONTRACTOR:	LICENSOR:	Document No.:	Rev.: 0
		Contract Job No.:	Type: DAS
			Page A

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)


CLIENT:





شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: Electrical Cable Data Sheet

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Rev.	Date					Prepared By			Checked By			Approved By			Status					
Document Revision																				
CONTRACTOR:						LICENSOR:						Document No.:						Rev.: 0		
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		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x300 rm , mm2			
	5	Cable Type	Flame Retardant Power Cable			
	6	Cable Designation Code	NYY			
	7	Cable Structure	Cu2 / PVC / PVC			
	8	Rated Voltage	0.6 / 1 (1.2) kV			
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1			
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material		PVC 70°C		
Conductor And Insulation	12	Number of Core		1		
	13	Conductor Cross Section		300 mm2		
	14	Number of Conductor wires		61		
	15	Diameter of Conductor wires		3.9 mm2		
	16	Nominal Thickness of Phase Insulation		2.4 mm		
	17	Insulation Material		PVC		
	18	Over Phase Insulation Diameter		VTA		
Outer Sheath	19	Color of Phase		Black		
	20	Sheath Material		PVC 70°C (ST1)		
	21	Sheath Color		Black		
Completed Cable	22	Sheath Thickness		1.7 mm		
	23	Completed Cable Approximate Diameter		VTA		
	24	Completed Cable Approximate Weight		VTA		
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C		0.0366 Ω/Km		
	26	Maximum Conductor Temperature-Normal Operation		70 °C		
	27	Maximum Conductor Temperature-Short Circuit		160 °C		
	28	Maximum Short-Circuit Current at 1 Second		50.0 kA		
	29	Power Frequency (AC) Test Voltage		5.0 kV		
	30	Insulation Resistance Constant Ki in Normal Operation		0.037 MΩ/km		
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2		
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath		150 - 150 %		
Installation	33	Minimum Bending Radius		VTA		
	34	Maximum Pulling Tension		VTA		
	35	Packing Type		Metal Drum		
	36	Cable Cutting		1*500 meter		
Environmental	37	Ambient Temperature		Min -20 °C , Max 90 °C		
	38	Minimum Temperature During Installation		-5 °C		
Special Properties	39	Fire Resistant (IEC 60331-21)		NO		
	40	Flame Retardant (IEC 60332-1)		YES		
	41	UV Resistant (UL 1581, Section 1200)		YES		
	42	Jacket properties		Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) NYY 1 X 300 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
Approved						

		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Electrical Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service		Electronic Power		
	3	Quantity		1500 Meter		
	4	Cable Size		3 x 50 rm + 35 rm , mm2		
	5	Cable Type		Flame Retardant Power Cable		
	6	Cable Designation Code		N2XRY		
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC		
	8	Rated Voltage		0.6 / 1 (1.2) kV		
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1		
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material		XLPE		
Phase Conductor And Insulation	12	Number of Phase		3		
	13	Conductor Cruss Section Phase		50 mm2		
	14	Number of Conductor wires Phase		7		
	15	Diameter of Conductor wires Phase		2.97 mm2		
	16	Round Phase Conductor Diameter		8.5 mm		
	17	Nominal Thickness of Phase Insulation		1 mm		
	18	Over Phase Insulation Diameter		VTA		
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown		
	20	Number of Neutral		1		
	21	Conductor Cruss Section Neutral		25 mm2		
	22	Number of Conductor wires Neutral		7		
	23	Diameter of Conductor wires Neutral		2.095 mm2		
	24	Round Neutral Conductor Diameter		6.28 mm		
	25	Nominal Thickness of Neutral Insulation		0.9 mm		
Inner Covering	26	Over Neutral Insulation Diameter		VTA		
	27	Color of Neutral		Blue		
	28	Inner Covering Type		Extruded Bedding		
	29	Extruded Bedding Material		PVC		
Armour	30	Extruded Bedding Thickness		1 mm		
	31	Over Inner Covering Diameter		VTA		
	32	Under Galvanized Steel Wire Armour Diameter		VTA		
	33	Steel Wire Armour's Diameter		1.6 mm		
	34	Polypropylene (PP) Tape Thickness		0.2 mm		
	35	Overlap percentage		35 %		
	36	Over Single Wire Armour+Tape Diameter		VTA		
Outer Sheath	37	Sheath Material		PVC 90°C (ST2)		
	38	Sheath Color		Black		
	39	Sheath Thickness		1.7 mm		
Completed Cable	40	Completed Cable Approximate Diameter		VTA		
	41	Completed Cable Approximate Weight		VTA		
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		0.387 Ω/Km		
	43	Maximum Resistance of Neutral Conductor at 20 °C		0.727 Ω/Km		
	44	Maximum Conductor Temperature-Normal Operation		90 °C		
	45	Maximum Conductor Temperature-Short Circuit		250 °C		
	46	Maximum Short-Circuit Current at 1 Second		7.15 kA		
	47	Power Frequency (AC) Test Voltage		3.5 kV		
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km		
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2		
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath		200 - 150 %		
Installation	51	Minimum Bending Radius		VTA		
	52	Maximum Pulling Tension		9506 N		
	53	Packing Type		Metal Drum		
	54	Cable Cutting		1*1500 Meter		
Environmental	55	Ambient Temperature		Min -20 °C , Max 90 °C		
	56	Minimum Temperature During Installation		-5 °C		
Special Properties	57	Fire Resistant (IEC 60331-21)		NO		
	58	Flame Retardant (IEC 60332-1)		YES		
	59	UV Resistant (UL 1581, Section 1200)		YES		
	60	Jacket properties		Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 50 rm / 25 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
Contractor Job No:		Doc. No:			
		Owner Job No:		Sheet No 1 of 6	
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1500 Meter	
	4	Cable Size		3 x 35 rm + 16 rm , mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		35 mm2	
	14	Number of Conductor wires Phase		7	
	15	Diameter of Conductor wires Phase		2.485 mm2	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.9 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		16 mm2	
	22	Number of Conductor wires Neutral		7	
	23	Diameter of Conductor wires Neutral		1.705 mm2	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armour Diameter		1.6 mm	
	34	Polypropylene (PP) Tape Thickness		0.2 mm	
	35	Overlap percentage		35 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		0.524 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.15 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		5.01 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2	
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath		200 - 150 %	
Installation	51	Minimum Bending Radius		VTA	
	52	Maximum Pulling Tension		7832 N	
	53	Packing Type		Metal Drum	
	54	Cable Cutting		1*1500 Meter	
Environmental	55	Ambient Temperature		Min -20 °c , Max 90 °c	
	56	Minimum Temperature During Installation		-5 °c	
Special Properties	57	Fire Resistant (IEC 60331-21)		NO	
	58	Flame Retardant (IEC 60332-1)		YES	
	59	UV Resistant (UL 1581, Section 1200)		YES	
	60	Jacket properties		Flame retardant; Abrasion resistant; Oil proof	
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 35 rm / 16 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
					Approved

		PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service	Electronic Power		
	3	Quantity	500 Meter		
	4	Cable Size	3 x 25 rm + 16 rm , mm2		
	5	Cable Type	Flame Retardant Power Cable		
	6	Cable Designation Code	N2XRY		
	7	Cable Structure	Cu2 / XLPE / PVC / SWA / PVC		
	8	Rated Voltage	0.6 / 1 (1.2) kV		
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1		
Common Features	10	Conductor(s) Type And Material	Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material	XLPE		
Phase Conductor And Insulation	12	Number of Phase	3		
	13	Conductor Cruss Section Phase	25 mm2		
	14	Number of Conductor wires Phase	7		
	15	Diameter of Conductor wires Phase	2.094 mm2		
	16	Round Phase Conductor Diameter	VTA		
	17	Nominal Thickness of Phase Insulation	0.9 mm		
	18	Over Phase Insulation Diameter	VTA		
Neutral Conductor And Insulation	19	Color of Phase	Black - Red - Brown		
	20	Number of Neutral	1		
	21	Conductor Cruss Section Neutral	16 mm2		
	22	Number of Conductor wires Neutral	7		
	23	Diameter of Conductor wires Neutral	1.705 mm2		
	24	Round Neutral Conductor Diameter	VTA		
	25	Nominal Thickness of Neutral Insulation	0.7 mm		
	26	Over Neutral Insulation Diameter	VTA		
	27	Color of Neutral	Blue		
Inner Covering	28	Inner Covering Type	Extruded Bedding		
	29	Extruded Bedding Material	PVC		
	30	Extruded Bedding Thickness	1 mm		
Armour	31	Over Inner Covering Diameter	VTA		
	32	Under Galvanized Steel Wire Armour Diameter	VTA		
	33	Steel Wire Armours Diameter	1.6 mm		
	34	Polypropylene (PP) Tape Thickness	0.1 mm		
	35	Overlap percentage	25 %		
	36	Over Single Wire Armour+Tape Diameter	VTA		
Outer Sheath	37	Sheath Material	PVC 90°C (ST2)		
	38	Sheath Color	Black		
	39	Sheath Thickness	1.6 mm		
Completed Cable	40	Completed Cable Approximate Diameter	VTA		
	41	Completed Cable Approximate Weight	VTA		
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C	0.727 Ω/Km		
	43	Maximum Resistance of Neutral Conductor at 20 °C	1.15 Ω/Km		
	44	Maximum Conductor Temperature-Normal Operation	90 °c		
	45	Maximum Conductor Temperature-Short Circuit	250 °c		
	46	Maximum Short-Circuit Current at 1 Second	3.58 kA		
	47	Power Frequency (AC) Test Voltage	3.5 kV		
	48	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km		
	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2		
Mechanical	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %		
	51	Minimum Bending Radius	VTA		
	52	Maximum Pulling Tension	6708 N		
	53	Packing Type	Metal Drum		
Environmental	54	Cable Cutting	1*500 Meter		
	55	Ambient Temperature	Min -20 °c , Max 90 °c		
	56	Minimum Temperature During Installation	-5 °c		
Special Properties	57	Fire Resistant (IEC 60331-21)	NO		
	58	Flame Retardant (IEC 60332-1)	YES		
	59	UV Resistant (UL 1581, Section 1200)	YES		
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking	(Cable Designation Code) N2XRY 3 X 25 rm / 16 rm mm² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note	Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
					Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1500 Meter	
	4	Cable Size		4 x 16 mm , mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		16 mm2	
	14	Number of Conductor wires Phase		7	
	15	Diameter of Conductor wires Phase		1.705 mm2	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		16 mm2	
	22	Number of Conductor wires Neutral		7	
	23	Diameter of Conductor wires Neutral		1.705 mm2	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.6 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
Outer Sheath	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.15 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.15 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		2.29 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	5358 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 16 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		3000 Meter	
	4	Cable Size		4 x 10 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		10 mm ²	
	14	Number of Conductor wires Phase		81	
	15	Diameter of Conductor wires Phase		0.382 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		10 mm ²	
	22	Number of Conductor wires Neutral		81	
	23	Diameter of Conductor wires Neutral		0.382 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.91 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.91 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		1.43 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	4083 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 & 1*1000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 10 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		3000 Meter	
	4	Cable Size		3 x 10 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		10 mm ²	
	14	Number of Conductor wires Phase		81	
	15	Diameter of Conductor wires Phase		0.382 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		NA	
	21	Conductor Cruss Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
Inner Covering	26	Over Neutral Insulation Diameter		NA	
	27	Color of Neutral		NA	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.91 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		1.43 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	3564 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 & 1*1000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 10 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2000 Meter	
	4	Cable Size		4 x 6 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		6 mm ²	
	14	Number of Conductor wires Phase		85	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		6 mm ²	
	22	Number of Conductor wires Neutral		85	
	23	Diameter of Conductor wires Neutral		0.282 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
	26	Over Neutral Insulation Diameter		VTA	
27	Color of Neutral		Blue		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		3.3 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		3.3 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	3114 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 6 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1500 Meter	
	4	Cable Size		3 x 6 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		6 mm ²	
	14	Number of Conductor wires Phase		85	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cruss Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		3.3 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2540 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 6 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2000 Meter	
	4	Cable Size		4 x 4 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		4 mm ²	
	14	Number of Conductor wires Phase		56	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		4 mm ²	
	22	Number of Conductor wires Neutral		56	
	23	Diameter of Conductor wires Neutral		0.282 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		4.95 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		4.95 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.57 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2510 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 4 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1500 Meter	
	4	Cable Size		3 x 4 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		4 mm ²	
	14	Number of Conductor wires Phase		56	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		4.95 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2218 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 4 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		500 Meter	
	4	Cable Size		4 x 2.5 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		2.5 mm ²	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		2.5 mm ²	
	22	Number of Conductor wires Neutral		52	
	23	Diameter of Conductor wires Neutral		0.232 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		7.98 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.36 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2450 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		4000 Meter	
	4	Cable Size		5 x 2.5 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY-J	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		2.5 mm ²	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		2.5 mm ²	
	22	Number of Conductor wires Neutral		52	
	23	Diameter of Conductor wires Neutral		0.232 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Earth Conductor And Insulation	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Number of Earth		1	
	29	Conductor Cruss Section Earth		2.5 mm ²	
	30	Number of Conductor wires Earth		52	
	31	Diameter of Conductor wires Earth		0.232 mm ²	
	32	Round Earth Conductor Diameter		VTA	
Inner Covering	33	Nominal Thickness of Earth Insulation		0.7 mm	
	34	Over Earth Insulation Diameter		VTA	
	35	Color of Earth		Yellow / Green	
	36	Inner Covering Type		Extruded Bedding	
	37	Extruded Bedding Material		PVC	
	38	Extruded Bedding Thickness		1 mm	
	39	Over Inner Covering Diameter		VTA	
Armour	40	Under Galvanized Steel Wire Armour Diameter		VTA	
	41	Steel Wire Armours Diameter		0.9 mm	
	42	Polypropylene (PP) Tape Thickness		0.1 mm	
	43	Overlap percentage		25 %	
Outer Sheath	44	Over Single Wire Armour+Tape Diameter		VTA	
	45	Sheath Material		PVC 90°c (ST2)	
	46	Sheath Color		Black	
Completed Cable	47	Sheath Thickness		1.6 mm	
	48	Completed Cable Approximate Diameter		VTA	
	49	Completed Cable Approximate Weight		VTA	
	50	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	51	Maximum Resistance of Neutral Conductor at 20 °C		7.98 Ω/Km	
	52	Maximum Resistance of Earth Conductor at 20 °C		7.98 Ω/Km	

Electrical	53	Maximum Conductor Temperature-Normal Operation	90 °c
	54	Maximum Conductor Temperature-Short Circuit	250 °c
	55	Maximum Short-Circuit Current at 1 Second	0.36 kA
	56	Power Frequency (AC) Test Voltage	3.5 kV
	57	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km
Mechanical	58	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2
	59	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %
Installation	60	Minimum Bending Radius	VTA
	61	Maximum Pulling Tension	2450 N
	62	Packing Type	Metal Drum
	63	Cable Cutting	2*2000 Meter
Environmental	64	Ambient Temperature	Min -20 °c , Max 90 °c
	65	Minimum Temperature During Installation	-5 °c
Special Properties	66	Fire Resistant (IEC 60331-21)	NO
	67	Flame Retardant (IEC 60332-1)	YES
	68	UV Resistant (UL 1581, Section 1200)	YES
	69	Jacket properties	Flame retardant; Abrasion resistant; Oil proof
Jet Printed Marking		(Cable Designation Code) N2XRY-J 5 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n	
Note		Production Tolerance. (± 5%)	
1	0	2022-01-24	IFA M . A GH . K
No.	Rev	Date	Status Prepared Checked Approved

PROJECT: Low Linear Density Poly Ethylene (CATALIST PP)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		6000 Meter	
	4	Cable Size		10 x 2.5 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		10	
	13	Conductor Cross Section Phase		2.5 mm ²	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black with White Number		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.36 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	4238 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	3*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 10 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (SAZ)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: Instrument Cable Data Sheet

INSTRUMENT CABLE DATA SHEET

CONTRACTOR:

LICENSOR:

Document No.:

Rev.: 0

Type: DAS

Contract Job No.:

Page A

PROJECT: Low Linear Density Poly Ethylene (SAZ)

CLIENT:




شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی


TITLE: Instrument Cable Data Sheet


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A	X																			
B	X																			
1	X																			
2	X																			
3	X																			
4	X																			
5	X																			
6	X																			
0	2022-01-24		M . A			GH . K						IFA								
Rev.	Date		Prepared By			Checked By			Approved By			Status								


Document Revision


CONTRACTOR:	LICENSOR:	Document No.:	Rev.: 0
		Contract Job No.:	Type: DAS
			Page B


		PROJECT: Low Linear Density Poly Ethylene (SAZ)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	12000 Meter			
	4	Cable Size	20x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / ISCR / OSCR / PVC / SWA / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	20			
	18	Every Pair Element Diameter	Black-White With numbered			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	0.036 mm			
	20	Tinned Drain Wire Size	0.5 mm2			
Overall Screen	21	Number of Drain Wire	1			
	22	Aluminium Polyester Tape Thickness	0.036 mm			
	23	Polyester Tape Thickness	0.036 mm			
	24	Individual Screened Element Diameter	VTA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1.5 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	1.25 mm			
	35	Polypropylene (PP) Tape Thickness	0.1 mm			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	VTA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.8 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR M32)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
Installation	45	Maximum Mutual Capacitance	150 nf/km			
	46	Maximum Capacitance Between Core to Screen	300 pf/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Environmental	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	9618 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	6*2000 meter			
Special Properties	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
Jet Printed Marking		(Cable Designation Code) 20 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (SAZ)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 2 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	2500 Meter			
	4	Cable Size	20x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / OSCR / PVC / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
	17	Number of Pairs	20			
	18	Every Pair Element Diameter	Black-White With numbered			
Individual Screen	19	Polyester Tape Thickness (2 Layers: ID+SC)	NA			
	20	Tinned Drain Wire Size	NA			
	21	Number of Drain Wire	NA			
	22	Aluminium Polyester Tape Thickness	NA			
	23	Polyester Tape Thickness	NA			
	24	Individual Screened Element Diameter	NA			
Overall Screen	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
Inner Sheath	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1.5 mm			
Armour	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	NA			
	35	Polypropylene (PP) Tape Thickness	NA			
	36	Overlap percentage	25 %			
	37	Over Armour+Tape Diameter	VTA			
Outer Sheath	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.5 mm			
Completed Cable	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR M25)			
Electrical	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
	45	Maximum Mutual Capacitance	150 nf/km			
	46	Maximum Capacitance Between Core to Screen	300 pf/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Installation	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	9618 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	1*2500 meter			
Environmental	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
Special Properties	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
	57	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) 20 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

		PROJECT: Low Linear Density Poly Ethylene (SAZ)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Instrument Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 3 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service	Electronic signal		
	3	Quantity	500 Meter		
	4	Cable Size	3x2x0.75 mm2		
	5	Cable Type	Flame retardant instrumentation cable		
	6	Cable Structure	Cu2 / XLPE / ISCR / OSCR / PVC / SWA / PVC		
	7	Rated Voltage	300/500V		
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1		
Conductor	9	Conductor Cruss Section	0.75 mm2		
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper		
	11	Number of Conductor wires	7		
	12	Diameter of Conductor wires	0.38 mm2		
Insulation	13	Conductor diameter	1.14 mm		
	14	Insulation Material	XLPE		
	15	Insulation Thickness	0.52 mm		
	16	Over insulation diameter	2.18 mm		
Individual Screen	17	Number of Pairs	3		
	18	Every Pair Element Diameter	Black-White With numbered		
	19	Polyester Tape Thickness (2 Layers: ID+SC)	0.036 mm		
	20	Tinned Drain Wire Size (Class 2)	0.5 mm2		
Overall Screen	21	Number of Drain Wire	1		
	22	Aluminium Polyester Tape Thickness	0.036 mm		
	23	Polyester Tape Thickness	0.036 mm		
	24	Individual Screened Element Diameter	VTA		
Inner Sheath	25	Polyester Tape Thickness	0.036 mm		
	26	Tinned Drain Wire Size (Class 2)	0.5 mm2		
	27	Number of Drain Wire	1		
	28	Aluminium Polyester Tape Thickness	0.036 mm		
Armour	29	Polyester Tape Thickness	0.036 mm		
	30	Over Overall Screen Diameter	VTA		
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)		
	32	Inner Sheath (Bedding) Thickness	1 mm		
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA		
	34	Steel Wire Armours Diameter	0.9 mm		
	35	Polypropylene (PP) Tape Thickness	0.1 mm		
	36	Overlap percentage	25 %		
Completed Cable	37	Over Armour+Tape Diameter	VTA		
	38	Sheath Material	PVC 90°C (ST2)		
	39	Sheath Color	Blue RAL 5015		
	40	Sheath Thickness	1.4 mm		
Electrical	41	Completed Cable Approximate Diameter	VTA		
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR A20)		
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km		
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω		
Installation	45	Maximum Mutual Capacitance	150 nF/km		
	46	Maximum Capacitance Between Core to Screen	300 pF/250m		
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc		
	48	Maximum Conductor Temperature	90 °c		
Environmental	49	Minimum Bending Radius	VTA		
	50	Maximum Pulling Tension	2465 N		
	51	Packing Type	Metal Drum		
	52	Cable Cutting	1*500 meter		
Special Properties	53	Ambient Temperature	Min -20 °c , Max 90 °c		
	54	Minimum Temperature During Installation	-5 °c		
	55	Flame Retardant (IEC 60332-1)	YES		
		56	UV Resistant (UL 1581, Section 1200)	YES	
		57	Jacket properties	Flame retardant; Abrasion resistant; Oil proof	
Jet Printed Marking		(Cable Designation Code) 3 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
Approved					

		PROJECT: Low Linear Density Poly Ethylene (SAZ)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Instrument Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 4 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service	Electronic signal		
	3	Quantity	500 Meter		
	4	Cable Size	2x2x0.75 mm2		
	5	Cable Type	Flame retardant instrumentation cable		
	6	Cable Structure	Cu2 / XLPE / ISCR / OSCR / PVC / SWA / PVC		
	7	Rated Voltage	300/500V		
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1		
Conductor	9	Conductor Cruss Section	0.75 mm2		
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper		
	11	Number of Conductor wires	7		
	12	Diameter of Conductor wires	0.38 mm2		
Insulation	13	Conductor diameter	1.14 mm		
	14	Insulation Material	XLPE		
	15	Insulation Thickness	0.52 mm		
	16	Over insulation diameter	2.18 mm		
Individual Screen	17	Number of Pairs	2		
	18	Every Pair Element Diameter	Black-White With numbered		
	19	Polyester Tape Thickness (2 Layers: ID+SC)	0.036 mm		
	20	Tinned Drain Wire Size (Class 2)	0.5 mm2		
Overall Screen	21	Number of Drain Wire	1		
	22	Aluminium Polyester Tape Thickness	0.036 mm		
	23	Polyester Tape Thickness	0.036 mm		
	24	Individual Screened Element Diameter	VTA		
Inner Sheath	25	Polyester Tape Thickness	0.036 mm		
	26	Tinned Drain Wire Size (Class 2)	0.5 mm2		
	27	Number of Drain Wire	1		
	28	Aluminium Polyester Tape Thickness	0.036 mm		
Armour	29	Polyester Tape Thickness	0.036 mm		
	30	Over Overall Screen Diameter	VTA		
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)		
	32	Inner Sheath (Bedding) Thickness	1 mm		
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA		
	34	Steel Wire Armours Diameter	0.9 mm		
	35	Polypropylene (PP) Tape Thickness	0.1 mm		
	36	Overlap percentage	25 %		
Completed Cable	37	Over Armour+Tape Diameter	VTA		
	38	Sheath Material	PVC 90°C (ST2)		
	39	Sheath Color	Blue RAL 5015		
	40	Sheath Thickness	1.4 mm		
Electrical	41	Completed Cable Approximate Diameter	VTA		
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR O20)		
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km		
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω		
Installation	45	Maximum Mutual Capacitance	150 nF/km		
	46	Maximum Capacitance Between Core to Screen	300 pF/250m		
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc		
	48	Maximum Conductor Temperature	90 °c		
Environmental	49	Minimum Bending Radius	VTA		
	50	Maximum Pulling Tension	2267 N		
	51	Packing Type	Metal Drum		
	52	Cable Catting	1*500 meter		
Special Properties	53	Ambient Temperature	Min -20 °c , Max 90 °c		
	54	Minimum Temperature During Installation	-5 °c		
	55	Flame Retardant (IEC 60332-1)	YES		
	56	UV Resistant (UL 1581, Section 1200)	YES		
Jet Printed Marking		(Cable Designation Code) 2 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
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		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:		Doc. No:		
		Owner Job No:		Sheet No 5 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	3000 Meter			
	4	Cable Size	1x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / OSCR / PVC / SWA / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cross Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	1			
	18	Every Pair Element Diameter	Black-White			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	NA			
	20	Tinned Drain Wire Size	NA			
Overall Screen	21	Number of Drain Wire	NA			
	22	Aluminium Polyester Tape Thickness	NA			
	23	Polyester Tape Thickness	NA			
	24	Individual Screened Element Diameter	NA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	0.9 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	0.9 mm			
	35	Polypropylene (PP) Tape Thickness	0.1 mm			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	VTA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.3 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR O20)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
Installation	45	Maximum Mutual Capacitance	150 nF/km			
	46	Maximum Capacitance Between Core to Screen	300 pF/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVvac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °C			
Environmental	49	Minimum Bending Radius	VTA			
	50	Maximum Pulling Tension	1133 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	1*3000 meter			
Special Properties	53	Ambient Temperature	Min -20 °C , Max 90 °C			
	54	Minimum Temperature During Installation	-5 °C			
	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
Jet Printed Marking		(Cable Designation Code) 1 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
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		PROJECT: Low Linear Density Poly Ethylene (SAZ)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی		
		TITLE: Instrument Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 6 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic signal			
	3	Quantity	2000 Meter			
	4	Cable Size	1x2x0.75 mm2			
	5	Cable Type	Flame retardant instrumentation cable			
	6	Cable Structure	Cu2 / XLPE / OSCR / PVC / PVC			
	7	Rated Voltage	300/500V			
	8	Applied Standard	BS EN 50288-7 & IEC 60332-1			
Conductor	9	Conductor Cruss Section	0.75 mm2			
	10	Conductor Type	Stranded (Class 2) Round Annealed Copper			
	11	Number of Conductor wires	7			
	12	Diameter of Conductor wires	0.38 mm2			
Insulation	13	Conductor diameter	1.14 mm			
	14	Insulation Material	XLPE			
	15	Insulation Thickness	0.52 mm			
	16	Over insulation diameter	2.18 mm			
Individual Screen	17	Number of Pairs	1			
	18	Every Pair Element Diameter	Black-White			
	19	Polyester Tape Thickness (2 Layers: ID+SC)	NA			
	20	Tinned Drain Wire Size (Class 2)	NA			
Overall Screen	21	Number of Drain Wire	NA			
	22	Aluminium Polyester Tape Thickness	NA			
	23	Polyester Tape Thickness	NA			
	24	Individual Screened Element Diameter	NA			
Inner Sheath	25	Polyester Tape Thickness	0.036 mm			
	26	Tinned Drain Wire Size (Class 2)	0.5 mm2			
	27	Number of Drain Wire	1			
	28	Aluminium Polyester Tape Thickness	0.036 mm			
Armour	29	Polyester Tape Thickness	0.036 mm			
	30	Over Overall Screen Diameter	VTA			
	31	Inner Sheath (Bedding) Material	PVC 90°C (ST2)			
	32	Inner Sheath (Bedding) Thickness	1.5 mm			
Outer Sheath	33	Under Galvanized Steel Wire Armour Diameter	VTA			
	34	Steel Wire Armours Diameter	NA			
	35	Polypropylene (PP) Tape Thickness	NA			
	36	Overlap percentage	25 %			
Completed Cable	37	Over Armour+Tape Diameter	NA			
	38	Sheath Material	PVC 90°C (ST2)			
	39	Sheath Color	Blue RAL 5015			
	40	Sheath Thickness	1.3 mm			
Electrical	41	Completed Cable Approximate Diameter	VTA			
	42	Cable overall diameter nominal/max mm	VTA (SUITABLE FOR O20)			
	43	Maximum Resistance of Conductor at 20 °C	24.99 Ω/Km			
	44	Inductance to Resistance Ratio (L/R)	25 µH/Ω			
Installation	45	Maximum Mutual Capacitance	150 nF/km			
	46	Maximum Capacitance Between Core to Screen	300 pF/250m			
	47	Dielectric Strength - Duration 1 Minute	2 KVac OR 3 KVdc			
	48	Maximum Conductor Temperature	90 °c			
Environmental	49	Minimum Bending Radius	392 mm			
	50	Maximum Pulling Tension	1133 N			
	51	Packing Type	Metal Drum			
	52	Cable Cutting	1*2000 meter			
Special Properties	53	Ambient Temperature	Min -20 °c , Max 90 °c			
	54	Minimum Temperature During Installation	-5 °c			
	55	Flame Retardant (IEC 60332-1)	YES			
	56	UV Resistant (UL 1581, Section 1200)	YES			
Jet Printed Marking		(Cable Designation Code) 1 x 2 x 0.75 mm2 rm 300/500 V BS EN 50288-7 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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PROJECT: Low Linear Density Poly Ethylene (SAZ)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: ERTING Cable Data Sheet

ERTING CABLE DATA SHEET

CONTRACTOR:

LICENSOR:

Document No.:

Rev.: 0

Type: DAS

Contract Job No.:

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PROJECT: Low Linear Density Poly Ethylene (SAZ)


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شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی


TITLE: Electrical Cable Data Sheet


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B	X																			
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3	X																			
4	X																			
5	X																			
6	X																			
7	X																			
8	X																			
9	X																			
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Rev.	Date		Prepared By			Checked By			Approved By			Status								
Document Revision																				
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																		Type: DAS		
												Contract Job No.:						Page B		


		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x70 mm ²			
	5	Cable Type	Stranded Bare Wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu2			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60228			
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core		1		
	13	Conductor Cross Section		70 mm ²		
	14	Number of Conductor wires		1*2.125 mm		
	15	Diameter of Conductor wires		10.63 mm		
	16	Nominal Thickness of Phase Insulation		2.4 mm		
	17	Insulation Material				
	18	Over Phase Insulation Diameter				
Outer Sheath	19	Color of Phase				
	20	Sheath Material				
	21	Sheath Color				
Completed Cable	22	Sheath Thickness				
	23	Completed Cable Approximate Diameter		106 mm		
	24	Completed Cable Approximate Weight		619 kg/km		
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C		0.268 Ω/Km		
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage				
	30	Insulation Resistance Constant Ki in Normal Operation				
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath				
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath				
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type		Metal Drum		
Environmental	36	Cable Cutting		1*500 meter		
	37	Ambient Temperature				
	38	Minimum Temperature During Installation		-5 °c		
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 70 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
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		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 2 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x95 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage	450/750 V			
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	95 mm2			
	14	Number of Conductor wires	461 x 0.485 mm			
	15	Diameter of Conductor wires	13.3 mm			
	16	Nominal Thickness of Phase Insulation	1.6 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	16.5 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	16.5 mm			
	24	Completed Cable Approximate Weight	936 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.206 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0032 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 95 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
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		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 3 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x70 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	70 mm2			
	14	Number of Conductor wires	576 x 0.382 mm			
	15	Diameter of Conductor wires	11.8 mm			
	16	Nominal Thickness of Phase Insulation	1.4 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	14.6 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	14.6 mm			
	24	Completed Cable Approximate Weight	718 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.272 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0032 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 70 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
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		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 4 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x50 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material		Flexibele (Class 5) Round Annealed Copper		
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core		1		
	13	Conductor Cross Section		50 mm2		
	14	Number of Conductor wires		402 x 0.382 mm		
	15	Diameter of Conductor wires		9.6 mm		
	16	Nominal Thickness of Phase Insulation		1.4 mm		
	17	Insulation Material		PVC 70 °c		
	18	Over Phase Insulation Diameter		12.4 mm		
	19	Color of Phase		Y/G		
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter		12.4 mm		
	24	Completed Cable Approximate Weight		515 kg/km		
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C		0.386 Ω/Km		
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage		2500 V		
	30	Minimum Insulation Resistance at 70 °C		0.0037 MΩ.Km		
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - ----- n/mm2		
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath		125 - ----- %		
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type		wooden drum		
	36	Cable Cutting		1*500 meter		
Environmental	37	Ambient Temperature		min -20 °c , max 70 °c		
	38	Minimum Temperature During Installation		-5 °c		
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 50 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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					Approved	

		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 5 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x35 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	35 mm2			
	14	Number of Conductor wires	288 x 0.382 mm			
	15	Diameter of Conductor wires	8.1 mm			
	16	Nominal Thickness of Phase Insulation	1.2 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	10.5 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	10.5 mm			
	24	Completed Cable Approximate Weight	364 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.554 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0038 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 35 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	

		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 6 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x25 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	25 mm2			
	14	Number of Conductor wires	197 x 0.382 mm			
	15	Diameter of Conductor wires	6.61 mm			
	16	Nominal Thickness of Phase Insulation	1.2 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	9 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	9 mm			
	24	Completed Cable Approximate Weight	278 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	0.78 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0044 MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 25 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	

		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 7 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x10 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	10 mm2			
	14	Number of Conductor wires	81 x 0.382 mm			
	15	Diameter of Conductor wires	4.12 mm			
	16	Nominal Thickness of Phase Insulation	1 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	6.17 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	6.2 mm			
	24	Completed Cable Approximate Weight	117 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	1.91 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.0056MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x10 mm² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	

		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 8 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	500 Meter			
	4	Cable Size	1x6 mm2			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	6 mm2			
	14	Number of Conductor wires	85 x 0.282 mm			
	15	Diameter of Conductor wires	3.02 mm			
	16	Nominal Thickness of Phase Insulation	0.8 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	4.8 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	4.8 mm			
	24	Completed Cable Approximate Weight	66 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	3.3 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.006MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm2			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*500 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 6 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
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		PROJECT: Low Linear Density Poly Ethylene (SAZ)			 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: ERTING Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 9 of 9			
General Information	1	Cable Code	Manufacturer			
	2	Cable Service	ERTING Power			
	3	Quantity	200 Meter			
	4	Cable Size	1x4 mm ²			
	5	Cable Type	Flame Retardant flexible wire			
	6	Cable Designation Code				
	7	Cable Structure	Cu5/pvc			
	8	Rated Voltage				
	9	Applied Standard (s)	IEC 60227-3(02)			
Common Features	10	Conductor(s) Type And Material	Flexibele (Class 5) Round Annealed Copper			
	11	Insulation(s) Material				
Conductor And Insulation	12	Number of Core	1			
	13	Conductor Cross Section	4 mm ²			
	14	Number of Conductor wires	85 x 0.282 mm			
	15	Diameter of Conductor wires	3.02 mm			
	16	Nominal Thickness of Phase Insulation	0.8 mm			
	17	Insulation Material	PVC 70 °c			
	18	Over Phase Insulation Diameter	4.8 mm			
	19	Color of Phase	Y/G			
Outer Sheath	20	Sheath Material				
	21	Sheath Color				
	22	Sheath Thickness				
Completed Cable	23	Completed Cable Approximate Diameter	4.8 mm			
	24	Completed Cable Approximate Weight	66 kg/km			
Electrical	25	Maximum Resistance of Phase Conductor at 20 °C	3.3 Ω/Km			
	26	Maximum Conductor Temperature-Normal Operation				
	27	Maximum Conductor Temperature-Short Circuit				
	28	Maximum Short-Circuit Current at 1 Second				
	29	Power Frequency (AC) Test Voltage	2500 V			
	30	Minimum Insulation Resistance at 70 °C	0.006MΩ.Km			
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - ----- n/mm ²			
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath	125 - ----- %			
Installation	33	Minimum Bending Radius				
	34	Maximum Pulling Tension				
	35	Packing Type	wooden drum			
	36	Cable Cutting	1*200 meter			
Environmental	37	Ambient Temperature	min -20 °c , max 70 °c			
	38	Minimum Temperature During Installation	-5 °c			
Special Properties	39	Fire Resistant (IEC 60331-21)				
	40	Flame Retardant (IEC 60332-1)				
	41	UV Resistant (UL 1581, Section 1200)				
	42	Jacket properties				
Jet Printed Marking		(Cable Designation Code) 1 x 4 mm ² 450/750 ISIRI (670)02 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
					Approved	

PROJECT: Low Linear Density Poly Ethylene (saz)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE: Electrical Cable Data Sheet

ELECTRICAL CABLE DATA SHEET

CONTRACTOR:

LICENSOR:

Document No.:

Rev.: 0

Type: DAS

Contract Job No.:

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PROJECT: Low Linear Density Poly Ethylene (saz)

CLIENT:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی


TITLE: Electrical Cable Data Sheet


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Rev.	Date	Prepared By	Checked By	Approved By	Status

Document Revision

CONTRACTOR:		LICENSOR:		Document No.:		Rev.: 0	
						Type: DAS	
				Contract Job No.:		Page B	

		PROJECT: Low Linear Density Poly Ethylene (saz)			 شرکت مای صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet				
		Contractor Job No:	Doc. No:			
		Owner Job No:	Sheet No 1 of 6			
General Information	1	Cable Code	Manufacturer	VTA	VTA	
	2	Cable Service	Electronic Power			
	3	Quantity	1000 Meter			
	4	Cable Size	1x300 rm , mm2			
	5	Cable Type	Flame Retardant Power Cable			
	6	Cable Designation Code	NYY			
	7	Cable Structure	Cu2 / PVC / PVC			
	8	Rated Voltage	0.6 / 1 (1.2) kV			
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1			
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material		PVC 70°C		
Conductor And Insulation	12	Number of Core		1		
	13	Conductor Cross Section		300 mm2		
	14	Number of Conductor wires		61		
	15	Diameter of Conductor wires		3.9 mm2		
	16	Nominal Thickness of Phase Insulation		2.4 mm		
	17	Insulation Material		PVC		
	18	Over Phase Insulation Diameter		VTA		
Outer Sheath	19	Color of Phase		Black		
	20	Sheath Material		PVC 70°C (ST1)		
	21	Sheath Color		Black		
Completed Cable	22	Sheath Thickness		1.7 mm		
	23	Completed Cable Approximate Diameter		VTA		
Electrical	24	Completed Cable Approximate Weight		VTA		
	25	Maximum Resistance of Phase Conductor at 20 °C		0.0366 Ω/Km		
	26	Maximum Conductor Temperature-Normal Operation		70 °C		
	27	Maximum Conductor Temperature-Short Circuit		160 °C		
	28	Maximum Short-Circuit Current at 1 Second		50.0 kA		
	29	Power Frequency (AC) Test Voltage		5.0 kV		
	30	Insulation Resistance Constant Ki in Normal Operation		0.037 MΩ/km		
Mechanical	31	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2		
	32	Minimum Elongation-at-Break of Insulation - Outer Sheath		150 - 150 %		
Installation	33	Minimum Bending Radius		VTA		
	34	Maximum Pulling Tension		VTA		
	35	Packing Type		Metal Drum		
Environmental	36	Cable Cutting		1*1000 meter		
	37	Ambient Temperature		Min -20 °C , Max 90 °C		
Special Properties	38	Minimum Temperature During Installation		-5 °C		
	39	Fire Resistant (IEC 60331-21)		NO		
	40	Flame Retardant (IEC 60332-1)		YES		
	41	UV Resistant (UL 1581, Section 1200)		YES		
	42	Jacket properties		Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) NYY 1 X 300 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	
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		PROJECT: Low Linear Density Poly Ethylene (saz)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1000 Meter	
	4	Cable Size		3 x 50 rm +35 rm , mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		50 mm2	
	14	Number of Conductor wires Phase		7	
	15	Diameter of Conductor wires Phase		2.97 mm2	
	16	Round Phase Conductor Diameter		8.5 mm	
	17	Nominal Thickness of Phase Insulation		1 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		25 mm2	
	22	Number of Conductor wires Neutral		7	
	23	Diameter of Conductor wires Neutral		2.095 mm2	
	24	Round Neutral Conductor Diameter		6.28 mm	
	25	Nominal Thickness of Neutral Insulation		0.9 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armour Diameter		1.6 mm	
	34	Polypropylene (PP) Tape Thickness		0.2 mm	
	35	Overlap percentage		35 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.7 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		0.387 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		0.727 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		7.15 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath		12.5 - 12.5 N/mm2	
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath		200 - 150 %	
Installation	51	Minimum Bending Radius		VTA	
	52	Maximum Pulling Tension		9506 N	
	53	Packing Type		Metal Drum	
	54	Cable Cutting		1*1000 Meter	
Environmental	55	Ambient Temperature		Min -20 °c , Max 90 °c	
	56	Minimum Temperature During Installation		-5 °c	
Special Properties	57	Fire Resistant (IEC 60331-21)		NO	
	58	Flame Retardant (IEC 60332-1)		YES	
	59	UV Resistant (UL 1581, Section 1200)		YES	
	60	Jacket properties		Flame retardant; Abrasion resistant; Oil proof	
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 50 rm / 35 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
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		PROJECT: Low Linear Density Poly Ethylene (saz)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service	Electronic Power		
	3	Quantity	1000 Meter		
	4	Cable Size	3 x 35 rm + 16 rm , mm2		
	5	Cable Type	Flame Retardant Power Cable		
	6	Cable Designation Code	N2XRY		
	7	Cable Structure	Cu2 / XLPE / PVC / SWA / PVC		
	8	Rated Voltage	0.6 / 1 (1.2) kV		
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1		
Common Features	10	Conductor(s) Type And Material	Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material	XLPE		
Phase Conductor And Insulation	12	Number of Phase	3		
	13	Conductor Cruss Section Phase	35 mm2		
	14	Number of Conductor wires Phase	7		
	15	Diameter of Conductor wires Phase	2.485 mm2		
	16	Round Phase Conductor Diameter	VTA		
	17	Nominal Thickness of Phase Insulation	0.9 mm		
	18	Over Phase Insulation Diameter	VTA		
Neutral Conductor And Insulation	19	Color of Phase	Black - Red - Brown		
	20	Number of Neutral	1		
	21	Conductor Cruss Section Neutral	16 mm2		
	22	Number of Conductor wires Neutral	7		
	23	Diameter of Conductor wires Neutral	1.705 mm2		
	24	Round Neutral Conductor Diameter	VTA		
	25	Nominal Thickness of Neutral Insulation	0.7 mm		
Inner Covering	26	Over Neutral Insulation Diameter	VTA		
	27	Color of Neutral	Blue		
	28	Inner Covering Type	Extruded Bedding		
	29	Extruded Bedding Material	PVC		
Armour	30	Extruded Bedding Thickness	1 mm		
	31	Over Inner Covering Diameter	VTA		
	32	Under Galvanized Steel Wire Armour Diameter	VTA		
	33	Steel Wire Armours Diameter	1.6 mm		
	34	Polypropylene (PP) Tape Thickness	0.2 mm		
	35	Overlap percentage	35 %		
	36	Over Single Wire Armour+Tape Diameter	VTA		
Outer Sheath	37	Sheath Material	PVC 90°c (ST2)		
	38	Sheath Color	Black		
	39	Sheath Thickness	1.6 mm		
Completed Cable	40	Completed Cable Approximate Diameter	VTA		
	41	Completed Cable Approximate Weight	VTA		
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C	0.524 Ω/Km		
	43	Maximum Resistance of Neutral Conductor at 20 °C	1.15 Ω/Km		
	44	Maximum Conductor Temperature-Normal Operation	90 °c		
	45	Maximum Conductor Temperature-Short Circuit	250 °c		
	46	Maximum Short-Circuit Current at 1 Second	5.01 kA		
	47	Power Frequency (AC) Test Voltage	3.5 kV		
	48	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km		
Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2		
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %		
Installation	51	Minimum Bending Radius	VTA		
	52	Maximum Pulling Tension	7832 N		
	53	Packing Type	Metal Drum		
	54	Cable Cutting	1*1000 Meter		
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c		
	56	Minimum Temperature During Installation	-5 °c		
Special Properties	57	Fire Resistant (IEC 60331-21)	NO		
	58	Flame Retardant (IEC 60332-1)	YES		
	59	UV Resistant (UL 1581, Section 1200)	YES		
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 35 rm / 16 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n			
Note		Production Tolerance. (± 5%)			
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
					Approved

		PROJECT: Low Linear Density Poly Ethylene (saz)		 شرکت ملی صنایع پتروشیمی شرکت پژوهش و فناوری پتروشیمی	
		TITLE: Electrical Cable Data Sheet			
		Contractor Job No:	Doc. No:		
		Owner Job No:	Sheet No 1 of 6		
General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service	Electronic Power		
	3	Quantity	500 Meter		
	4	Cable Size	3 x 25 rm + 10 rm , mm2		
	5	Cable Type	Flame Retardant Power Cable		
	6	Cable Designation Code	N2XRY		
	7	Cable Structure	Cu2 / XLPE / PVC / SWA / PVC		
	8	Rated Voltage	0.6 / 1 (1.2) kV		
	9	Applied Standard (s)	IEC 60502-1 & IEC 60332-1		
Common Features	10	Conductor(s) Type And Material	Stranded (Class 2) Round Annealed Copper		
	11	Insulation(s) Material	XLPE		
Phase Conductor And Insulation	12	Number of Phase	3		
	13	Conductor Cruss Section Phase	25 mm2		
	14	Number of Conductor wires Phase	7		
	15	Diameter of Conductor wires Phase	2.094 mm2		
	16	Round Phase Conductor Diameter	VTA		
	17	Nominal Thickness of Phase Insulation	0.9 mm		
	18	Over Phase Insulation Diameter	VTA		
Neutral Conductor And Insulation	19	Color of Phase	Black - Red - Brown		
	20	Number of Neutral	1		
	21	Conductor Cruss Section Neutral	16 mm2		
	22	Number of Conductor wires Neutral	7		
	23	Diameter of Conductor wires Neutral	1.705 mm2		
	24	Round Neutral Conductor Diameter	VTA		
	25	Nominal Thickness of Neutral Insulation	0.7 mm		
Inner Covering	26	Over Neutral Insulation Diameter	VTA		
	27	Color of Neutral	Blue		
	28	Inner Covering Type	Extruded Bedding		
Armour	29	Extruded Bedding Material	PVC		
	30	Extruded Bedding Thickness	1 mm		
	31	Over Inner Covering Diameter	VTA		
Outer Sheath	32	Under Galvanized Steel Wire Armour Diameter	VTA		
	33	Steel Wire Armours Diameter	1.6 mm		
	34	Polypropylene (PP) Tape Thickness	0.1 mm		
	35	Overlap percentage	25 %		
	36	Over Single Wire Armour+Tape Diameter	VTA		
Completed Cable	37	Sheath Material	PVC 90°C (ST2)		
	38	Sheath Color	Black		
	39	Sheath Thickness	1.6 mm		
Electrical	40	Completed Cable Approximate Diameter	VTA		
	41	Completed Cable Approximate Weight	VTA		
	42	Maximum Resistance of Phase Conductor at 20 °C	0.727 Ω/Km		
	43	Maximum Resistance of Neutral Conductor at 20 °C	1.15 Ω/Km		
	44	Maximum Conductor Temperature-Normal Operation	90 °c		
	45	Maximum Conductor Temperature-Short Circuit	250 °c		
	46	Maximum Short-Circuit Current at 1 Second	3.58 kA		
Mechanical	47	Power Frequency (AC) Test Voltage	3.5 kV		
	48	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km		
	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2		
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %		
Installation	51	Minimum Bending Radius	VTA		
	52	Maximum Pulling Tension	6708 N		
	53	Packing Type	Metal Drum		
	54	Cable Cutting	1*500 Meter		
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c		
	56	Minimum Temperature During Installation	-5 °c		
Special Properties	57	Fire Resistant (IEC 60331-21)	NO		
	58	Flame Retardant (IEC 60332-1)	YES		
	59	UV Resistant (UL 1581, Section 1200)	YES		
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof		
Jet Printed Marking	(Cable Designation Code) N2XRY 3 X 25 rm / 10 rm mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note	Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K
No.	Rev	Date	Status	Prepared	Checked
					Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		500 Meter	
	4	Cable Size		4 x 16 mm , mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu2 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 2) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		16 mm2	
	14	Number of Conductor wires Phase		7	
	15	Diameter of Conductor wires Phase		1.705 mm2	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		16 mm2	
	22	Number of Conductor wires Neutral		7	
	23	Diameter of Conductor wires Neutral		1.705 mm2	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.6 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.15 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.15 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		2.29 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	5358 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 16 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2000 Meter	
	4	Cable Size		4 x 10 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		10 mm ²	
	14	Number of Conductor wires Phase		81	
	15	Diameter of Conductor wires Phase		0.382 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		10 mm ²	
	22	Number of Conductor wires Neutral		81	
	23	Diameter of Conductor wires Neutral		0.382 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		1.91 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		1.91 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		1.43 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	4083 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 10 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



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شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

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Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		2000 Meter	
	4	Cable Size		3 x 10 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		10 mm ²	
	14	Number of Conductor wires Phase		81	
	15	Diameter of Conductor wires Phase		0.382 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		1.91 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		1.43 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	3564 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*2000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 10 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1000 Meter	
	4	Cable Size		4 x 6 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		6 mm ²	
	14	Number of Conductor wires Phase		85	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		6 mm ²	
	22	Number of Conductor wires Neutral		85	
	23	Diameter of Conductor wires Neutral		0.282 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
	26	Over Neutral Insulation Diameter		VTA	
27	Color of Neutral		Blue		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		3.3 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		3.3 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	3114 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 6 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1000 Meter	
	4	Cable Size		3 x 6 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		6 mm ²	
	14	Number of Conductor wires Phase		85	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°C (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		3.3 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °C	
	45	Maximum Conductor Temperature-Short Circuit		250 °C	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2540 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1000 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 6 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

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شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1500 Meter	
	4	Cable Size		4 x 4 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		4 mm ²	
	14	Number of Conductor wires Phase		56	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		4 mm ²	
	22	Number of Conductor wires Neutral		56	
	23	Diameter of Conductor wires Neutral		0.282 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
	26	Over Neutral Insulation Diameter		VTA	
27	Color of Neutral		Blue		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		4.95 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		4.95 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.57 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2510 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 4 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		1500 Meter	
	4	Cable Size		3 x 4 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		4 mm ²	
	14	Number of Conductor wires Phase		56	
	15	Diameter of Conductor wires Phase		0.282 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
19	Color of Phase		Black - Red - Brown		
Neutral Conductor And Insulation	20	Number of Neutral		NA	
	21	Conductor Cross Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
	26	Over Neutral Insulation Diameter		NA	
27	Color of Neutral		NA		
Inner Covering	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
Armour	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		4.95 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.86 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2218 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*1500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 3 X 4 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		500 Meter	
	4	Cable Size		4 x 2.5 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cross Section Phase		2.5 mm ²	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cross Section Neutral		2.5 mm ²	
	22	Number of Conductor wires Neutral		52	
	23	Diameter of Conductor wires Neutral		0.232 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Inner Covering	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		0.9 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
Outer Sheath	36	Over Single Wire Armour+Tape Diameter		VTA	
	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
Completed Cable	39	Sheath Thickness		1.6 mm	
	40	Completed Cable Approximate Diameter		VTA	
Electrical	41	Completed Cable Approximate Weight		VTA	
	42	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		7.98 Ω/Km	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.36 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	2450 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	1*500 Meter			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 4 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		3000 Meter	
	4	Cable Size		5 x 2.5 mm ²	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY-J	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		3	
	13	Conductor Cruss Section Phase		2.5 mm ²	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm ²	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black - Red - Brown	
	20	Number of Neutral		1	
	21	Conductor Cruss Section Neutral		2.5 mm ²	
	22	Number of Conductor wires Neutral		52	
	23	Diameter of Conductor wires Neutral		0.232 mm ²	
	24	Round Neutral Conductor Diameter		VTA	
	25	Nominal Thickness of Neutral Insulation		0.7 mm	
Earth Conductor And Insulation	26	Over Neutral Insulation Diameter		VTA	
	27	Color of Neutral		Blue	
	28	Number of Earth		1	
	29	Conductor Cruss Section Earth		2.5 mm ²	
	30	Number of Conductor wires Earth		52	
	31	Diameter of Conductor wires Earth		0.232 mm ²	
	32	Round Earth Conductor Diameter		VTA	
Inner Covering	33	Nominal Thickness of Earth Insulation		0.7 mm	
	34	Over Earth Insulation Diameter		VTA	
	35	Color of Earth		Yellow / Green	
	36	Inner Covering Type		Extruded Bedding	
	37	Extruded Bedding Material		PVC	
	38	Extruded Bedding Thickness		1 mm	
	39	Over Inner Covering Diameter		VTA	
Armour	40	Under Galvanized Steel Wire Armour Diameter		VTA	
	41	Steel Wire Armours Diameter		0.9 mm	
	42	Polypropylene (PP) Tape Thickness		0.1 mm	
	43	Overlap percentage		25 %	
	44	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	45	Sheath Material		PVC 90°c (ST2)	
	46	Sheath Color		Black	
	47	Sheath Thickness		1.6 mm	
Completed Cable	48	Completed Cable Approximate Diameter		VTA	
	49	Completed Cable Approximate Weight		VTA	
	50	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	51	Maximum Resistance of Neutral Conductor at 20 °C		7.98 Ω/Km	
	52	Maximum Resistance of Earth Conductor at 20 °C		7.98 Ω/Km	

Electrical	53	Maximum Conductor Temperature-Normal Operation	90 °c
	54	Maximum Conductor Temperature-Short Circuit	250 °c
	55	Maximum Short-Circuit Current at 1 Second	0.36 kA
	56	Power Frequency (AC) Test Voltage	3.5 kV
	57	Insulation Resistance Constant Ki in Normal Operation	3.67 MΩ/km
Mechanical	58	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2
	59	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %
Installation	60	Minimum Bending Radius	VTA
	61	Maximum Pulling Tension	2450 N
	62	Packing Type	Metal Drum
	63	Cable Cutting	1*3000 Meter
Environmental	64	Ambient Temperature	Min -20 °c , Max 90 °c
	65	Minimum Temperature During Installation	-5 °c
Special Properties	66	Fire Resistant (IEC 60331-21)	NO
	67	Flame Retardant (IEC 60332-1)	YES
	68	UV Resistant (UL 1581, Section 1200)	YES
	69	Jacket properties	Flame retardant; Abrasion resistant; Oil proof
Jet Printed Marking		(Cable Designation Code) N2XRY-J 5 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n	
Note		Production Tolerance. (± 5%)	
1	0	2022-01-24	IFA M . A GH . K
No.	Rev	Date	Status Prepared Checked Approved

PROJECT: Low Linear Density Poly Ethylene (saz)

TITLE: Electrical Cable Data Sheet



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

Contractor Job No:

Doc. No:

Owner Job No:

Sheet No 1 of 6

General Information	1	Cable Code	Manufacturer	VTA	VTA
	2	Cable Service		Electronic Power	
	3	Quantity		6000 Meter	
	4	Cable Size		10 x 2.5 mm2	
	5	Cable Type		Flame Retardant Power Cable	
	6	Cable Designation Code		N2XRY	
	7	Cable Structure		Cu5 / XLPE / PVC / SWA / PVC	
	8	Rated Voltage		0.6 / 1 (1.2) kV	
	9	Applied Standard (s)		IEC 60502-1 & IEC 60332-1	
Common Features	10	Conductor(s) Type And Material		Stranded (Class 5) Round Annealed Copper	
	11	Insulation(s) Material		XLPE	
Phase Conductor And Insulation	12	Number of Phase		10	
	13	Conductor Cruss Section Phase		2.5 mm2	
	14	Number of Conductor wires Phase		52	
	15	Diameter of Conductor wires Phase		0.232 mm2	
	16	Round Phase Conductor Diameter		VTA	
	17	Nominal Thickness of Phase Insulation		0.7 mm	
	18	Over Phase Insulation Diameter		VTA	
Neutral Conductor And Insulation	19	Color of Phase		Black with White Number	
	20	Number of Neutral		NA	
	21	Conductor Cruss Section Neutral		NA	
	22	Number of Conductor wires Neutral		NA	
	23	Diameter of Conductor wires Neutral		NA	
	24	Round Neutral Conductor Diameter		NA	
	25	Nominal Thickness of Neutral Insulation		NA	
Inner Covering	26	Over Neutral Insulation Diameter		NA	
	27	Color of Neutral		NA	
	28	Inner Covering Type		Extruded Bedding	
	29	Extruded Bedding Material		PVC	
Armour	30	Extruded Bedding Thickness		1 mm	
	31	Over Inner Covering Diameter		VTA	
	32	Under Galvanized Steel Wire Armour Diameter		VTA	
	33	Steel Wire Armours Diameter		1.25 mm	
	34	Polypropylene (PP) Tape Thickness		0.1 mm	
	35	Overlap percentage		25 %	
	36	Over Single Wire Armour+Tape Diameter		VTA	
Outer Sheath	37	Sheath Material		PVC 90°c (ST2)	
	38	Sheath Color		Black	
	39	Sheath Thickness		1.6 mm	
Completed Cable	40	Completed Cable Approximate Diameter		VTA	
	41	Completed Cable Approximate Weight		VTA	
Electrical	42	Maximum Resistance of Phase Conductor at 20 °C		7.98 Ω/Km	
	43	Maximum Resistance of Neutral Conductor at 20 °C		NA	
	44	Maximum Conductor Temperature-Normal Operation		90 °c	
	45	Maximum Conductor Temperature-Short Circuit		250 °c	
	46	Maximum Short-Circuit Current at 1 Second		0.36 kA	
	47	Power Frequency (AC) Test Voltage		3.5 kV	
	48	Insulation Resistance Constant Ki in Normal Operation		3.67 MΩ/km	

Mechanical	49	Minimum Tensile Strength of Insulation - Outer Sheath	12.5 - 12.5 N/mm2			
	50	Minimum Elongation-at-Break of Insulation - Outer Sheath	200 - 150 %			
Installation	51	Minimum Bending Radius	VTA			
	52	Maximum Pulling Tension	4238 N			
	53	Packing Type	Metal Drum			
	54	Cable Cutting	3*2000			
Environmental	55	Ambient Temperature	Min -20 °c , Max 90 °c			
	56	Minimum Temperature During Installation	-5 °c			
Special Properties	57	Fire Resistant (IEC 60331-21)	NO			
	58	Flame Retardant (IEC 60332-1)	YES			
	59	UV Resistant (UL 1581, Section 1200)	YES			
	60	Jacket properties	Flame retardant; Abrasion resistant; Oil proof			
Jet Printed Marking		(Cable Designation Code) N2XRY 10 X 2.5 mm ² 0.6/1 kV ISIRI 3569-1 IRAN n Meter n				
Note		Production Tolerance. (± 5%)				
1	0	2022-01-24	IFA	M . A	GH . K	
No.	Rev	Date	Status	Prepared	Checked	Approved