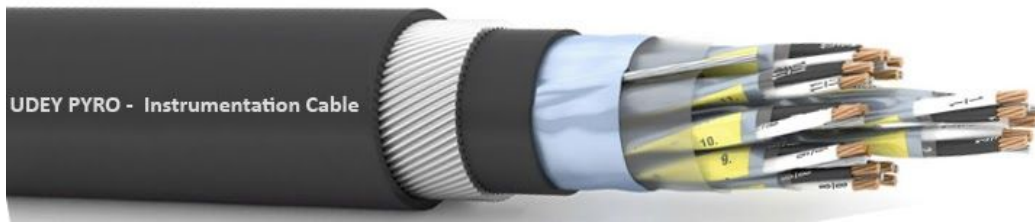


Instrumentation Cable



Type 1. Multi-Pair, Individual + Overall Shield

Standard

BS 5308, IS 1554, IEC 60332-1, IS 8130, IS 5831

Design

Conductor	Stranded (7 strands) Annealed Bare or Tinned Copper As per IS 8130
Insulation	PE/ XLPE
Color Code	Black - White / Blue - White With number printing on one core of each pair
Stranding	Two cores twisted together to form a pair
Screening (Individual Pair)	Aluminum/ Mylar Tape + ATC Drain wire
Screening (Overall)	Aluminum/ Mylar Tape + ATC Drain wire
Inner Sheath	PVC ST 2 As per IS 5831 (LSZH also available)
Armouring (Optional)	SWA / Steel Strip
Outer Sheath	PVC ST2 As per IS 5831 (LSZH also available)
Outer Sheath Color	Grey RAL 7032 (Other colors available on request)



Instrumentation Cable

Characteristics

Voltage Rating	250/ 500V
Test Voltage	1500V
Temperature Rating	Fixed: -20°C to +70°C Flexing: -5°C to +70°C
Min. Bending Radius	Fixed: 12 X OD Flexing: 20 X OD
Flame Retardant	IEC 60332-1 (Optional)
Insulation Resistance (Min.)	20 MΩ X km - XLPE 5 MΩ X km - PVC
Mutual Capacitance (Max.)	XLPE : Core to Core - 120 nF/ Km XLPE : Core to Screen - 250 nF/ Km PVC : Core to Core - 250 nF/ Km PVC : Core to Screen - 400 nF/ Km
L/R Ratio	Upto 1.0 sq.mm. : < 25 μH/Ω Upto 1.5 sq.mm. : < 40 μH/Ω Upto 2.5 sq.mm. : < 60 μH/Ω

Application

For transmitting digital and analog signals in instrumentation and control systems.



Instrumentation Cable

Part NO	Pairs	Insulation Thickness (In mm)	Armour Size (In mm)	Overall Diameter (In mm)
0.5 sq.mm.				
UP050101W2	1	0.6	0.9	10.5
UP050102W2	2	0.6	0.9	13.5
UP050103W2	3	0.6	0.9	14.5
UP050104W2	4	0.6	0.9	15.0
UP050106W2	6	0.6	0.9	17.0
UP050108F2	8	0.6	4 x 0.8	19.5
UP050110F2	10	0.6	4 x 0.8	20.0
UP050112F2	12	0.6	4 x 0.8	21.5
UP050114F2	14	0.6	4 x 0.8	23.0
UP050116F2	16	0.6	4 x 0.8	24.0
UP050118F2	18	0.6	4 x 0.8	25.5
UP050124F2	24	0.6	4 x 0.8	29.5
UP050136F2	36	0.6	4 x 0.8	33.5
0.75 sq.mm.				
UP052201W2	1	0.6	0.9	11.0
UP052202W2	2	0.6	0.9	14.5
UP052203W2	3	0.6	0.9	15.5
UP052204W2	4	0.6	0.9	16.0
UP052206F2	6	0.6	4 x 0.8	17.5
UP052208F2	8	0.6	4 x 0.8	20.5
UP052210F2	10	0.6	4 x 0.8	21.0
UP052212F2	12	0.6	4 x 0.8	23.0
UP052214F2	14	0.6	4 x 0.8	24.5
UP052216F2	16	0.6	4 x 0.8	25.0
UP052218F2	18	0.6	4 x 0.8	27.0
UP052224F2	24	0.6	4 x 0.8	31.0
UP052236F2	36	0.6	4 x 0.8	35.5
1.0 sq.mm.				
UP050201W2	1	0.6	0.9	11.5
UP050202W2	2	0.6	0.9	15.0
UP050203W2	3	0.6	0.9	16.0
UP050204W2	4	0.6	0.9	16.5
UP050206F2	6	0.6	4 x 0.8	19.0
UP050208F2	8	0.6	4 x 0.8	21.5
UP050210F2	10	0.6	4 x 0.8	22.5



Instrumentation Cable

UP050212F2	12	0.6	4 x 0.8	24.0
UP050214F2	14	0.6	4 x 0.8	26.0
UP050216F2	16	0.6	4 x 0.8	27.0
UP050218F2	18	0.6	4 x 0.8	28.5
UP050224F2	24	0.6	4 x 0.8	33.0
UP050236F2	36	0.6	4 x 0.8	37.5
1.5 sq.mm.				
UP050301W2	1	0.6	0.9	12.0
UP050302W2	2	0.6	0.9	16.5
UP050303W2	3	0.6	0.9	17.0
UP050304W2	4	0.6	0.9	17.5
UP050306F2	6	0.6	4 x 0.8	20.0
UP050308F2	8	0.6	4 x 0.8	23.0
UP050310F2	10	0.6	4 x 0.8	23.5
UP050312F2	12	0.6	4 x 0.8	27.0
UP050314F2	14	0.6	4 x 0.8	28.0
UP050316F2	16	0.6	4 x 0.8	29.0
UP050318F2	18	0.6	4 x 0.8	31.5
UP050324F2	24	0.6	4 x 0.8	36.0
UP050336F2	36	0.6	4 x 0.8	41.5
2.5 sq.mm.				
UP050401W2	1	0.6	0.9	12.5
UP050402W2	2	0.6	0.9	17.5
UP050403W2	3	0.6	0.9	18.0
UP050404F2	4	0.6	4 x 0.8	19.0
UP050406F2	6	0.6	4 x 0.8	22.5
UP050408F2	8	0.6	4 x 0.8	25.5
UP050410F2	10	0.6	4 x 0.8	26.5
UP050412F2	12	0.6	4 x 0.8	29.5
UP050414F2	14	0.6	4 x 0.8	31.0
UP050416F2	16	0.6	4 x 0.8	32.0
UP050418F2	18	0.6	4 x 0.8	34.5
UP050424F2	24	0.6	4 x 0.8	39.0
UP050436F2	36	0.6	4 x 0.8	45.5

* Table 1. Armoured Instrumentation cable - Individual Pair + Overall Shielded

* Cable also available in FRLS & ZHLS sheathing. Replace 2 by S or H respectively at the end of Part No.

* For Tinned Copper configuration add TC at the end of the Part Number

Instrumentation Cable



Type 2. Multi-Pair, Overall Shield

Standard

BS 5308, IS 1554, IEC 60332-1, IS 8130, IS 5831

Design

Conductor	Stranded (7 strands) Annealed Bare or Tinned Copper As per IS 8130
Insulation	PE/ XLPE
Color Code	Black - White / Blue - White With number printing on one core of each pair
Stranding	Two cores twisted together to form a pair
Screening (Overall)	Aluminum/ Mylar Tape + ATC Drain wire
Inner Sheath	PVC ST 2 As per IS 5831 (LSZH also available)
Armouring (Optional)	SWA / Steel Strip
Outer Sheath	PVC ST2 As per IS 5831 (LSZH also available)
Outer Sheath Color	Grey RAL 7032 (Other colors available on request)



Instrumentation Cable

Characteristics

Voltage Rating	250/ 500V
Test Voltage	1500V
Temperature Rating	Fixed: -20°C to +70°C Flexing: -5°C to +70°C
Min. Bending Radius	Fixed: 12 X OD Flexing: 20 X OD
Flame Retardant	IEC 60332-1 (Optional)
Insulation Resistance (Min.)	20 MΩ X km - XLPE 5 MΩ X km - PVC
Mutual Capacitance (Max.)	XLPE : Core to Core - 120 nF/ Km XLPE : Core to Screen - 250 nF/ Km PVC : Core to Core - 250 nF/ Km PVC : Core to Screen - 400 nF/ Km
L/R Ratio	Upto 1.0 sq.mm. : < 25 μH/Ω Upto 1.5 sq.mm. : < 40 μH/Ω Upto 2.5 sq.mm. : < 60 μH/Ω

Application

For transmitting digital and analog signals in instrumentation and control systems.



Instrumentation Cable

Part NO	Pairs	Insulation Thickness (In mm)	Armour Size (In mm)	Overall Diameter (In mm)
0.5 sq.mm.				
UP060101W2	1	0.6	0.9	10.5
UP060102W2	2	0.6	0.9	13.0
UP060103W2	3	0.6	0.9	13.5
UP060104W2	4	0.6	0.9	14.5
UP060106W2	6	0.6	0.9	16.5
UP060108F2	8	0.6	4 x 0.8	18.0
UP060110F2	10	0.6	4 x 0.8	19.5
UP060112F2	12	0.6	4 x 0.8	21.0
UP060114F2	14	0.6	4 x 0.8	22.0
UP060116F2	16	0.6	4 x 0.8	23.0
UP060118F2	18	0.6	4 x 0.8	24.0
UP060124F2	24	0.6	4 x 0.8	27.5
UP060136F2	36	0.6	4 x 0.8	31.0
0.75 sq.mm.				
UP062201W2	1	0.6	0.9	11.0
UP062202W2	2	0.6	0.9	14.0
UP062203W2	3	0.6	0.9	14.5
UP062204W2	4	0.6	0.9	15.5
UP062206F2	6	0.6	4 x 0.8	17.0
UP062208F2	8	0.6	4 x 0.8	19.5
UP062210F2	10	0.6	4 x 0.8	21.0
UP062212F2	12	0.6	4 x 0.8	22.0
UP062214F2	14	0.6	4 x 0.8	23.0
UP062216F2	16	0.6	4 x 0.8	24.5
UP062218F2	18	0.6	4 x 0.8	26.0
UP062224F2	24	0.6	4 x 0.8	29.5
UP062236F2	36	0.6	4 x 0.8	33.5
1.0 sq.mm.				
UP060201W2	1	0.6	0.9	11.5
UP060202W2	2	0.6	0.9	14.5
UP060203W2	3	0.6	0.9	15.0
UP060204W2	4	0.6	0.9	16.0
UP060206F2	6	0.6	4 x 0.8	18.5
UP060208F2	8	0.6	4 x 0.8	20.5
UP060210F2	10	0.6	4 x 0.8	22.0



Instrumentation Cable

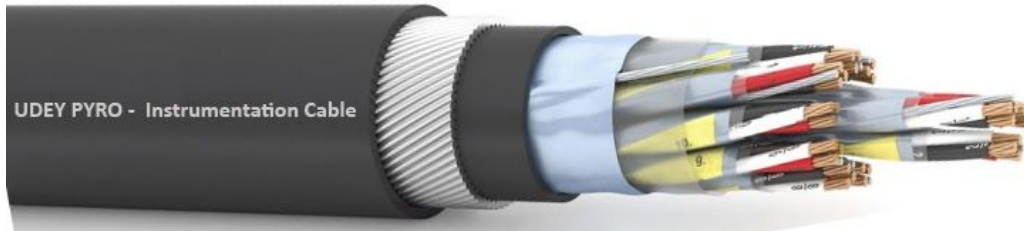
UP060212F2	12	0.6	4 x 0.8	23.0
UP060214F2	14	0.6	4 x 0.8	24.5
UP060216F2	16	0.6	4 x 0.8	26.0
UP060218F2	18	0.6	4 x 0.8	27.0
UP060224F2	24	0.6	4 x 0.8	31.0
UP060236F2	36	0.6	4 x 0.8	35.5
1.5 sq.mm.				
UP060301W2	1	0.6	0.9	12.0
UP060302W2	2	0.6	0.9	15.5
UP060303W2	3	0.6	0.9	16.0
UP060304W2	4	0.6	0.9	17.0
UP060306F2	6	0.6	4 x 0.8	19.5
UP060308F2	8	0.6	4 x 0.8	22.0
UP060310F2	10	0.6	4 x 0.8	24.0
UP060312F2	12	0.6	4 x 0.8	25.5
UP060314F2	14	0.6	4 x 0.8	26.5
UP060316F2	16	0.6	4 x 0.8	28.0
UP060318F2	18	0.6	4 x 0.8	29.5
UP060324F2	24	0.6	4 x 0.8	334.0
UP060336F2	36	0.6	4 x 0.8	38.5
2.5 sq.mm.				
UP060401W2	1	0.6	0.9	12.5
UP060402W2	2	0.6	0.9	17.0
UP060403W2	3	0.6	0.9	17.5
UP060404F2	4	0.6	4 x 0.8	18.5
UP060406F2	6	0.6	4 x 0.8	21.5
UP060408F2	8	0.6	4 x 0.8	24.0
UP060410F2	10	0.6	4 x 0.8	26.5
UP060412F2	12	0.6	4 x 0.8	28.0
UP060414F2	14	0.6	4 x 0.8	29.0
UP060416F2	16	0.6	4 x 0.8	31.0
UP060418F2	18	0.6	4 x 0.8	33.0
UP060424F2	24	0.6	4 x 0.8	37.5
UP060436F2	36	0.6	4 x 0.8	43.0

*Table 2. Armoured Instrumentation cable - Overall Shielded

* Cable also available in FRLS & ZHLS sheathing. Replace 2 by S or H respectively at the end of the Part No.

* For Tinned Copper configuration add TC at the end of the Part Number

Instrumentation Cable



Type 3. Multi-Triad, Individual + Overall Shield

Standard

BS 5308, IS 1554, IEC 60332-1, IS 8130, IS 5831

Design

Conductor	Stranded (7 strands) Annealed Bare or Tinned Copper As per IS 8130
Insulation	PE/ XLPE
Color Code	Black - White - Red With number printing on one core of each pair
Stranding	Three cores twisted together to form a pair
Screening (Individual Triad)	Aluminum/ Mylar Tape + ATC Drain wire
Screening (Overall)	Aluminum/ Mylar Tape + ATC Drain wire
Inner Sheath	PVC ST 2 As per IS 5831 (LSZH also available)
Armouring (Optional)	SWA / Steel Strip
Outer Sheath	PVC ST2 As per IS 5831 (LSZH also available)
Outer Sheath Color	Grey RAL 7032 (Other colors available on request)



Instrumentation Cable

Characteristics

Voltage Rating	250/ 500V
Test Voltage	1500V
Temperature Rating	Fixed: -20°C to +70°C Flexing: -5°C to +70°C
Min. Bending Radius	Fixed: 12 X OD Flexing: 20 X OD
Flame Retardant	IEC 60332-1 (Optional)
Insulation Resistance (Min.)	20 MΩ X km - XLPE 5 MΩ X km - PVC
Mutual Capacitance (Max.)	XLPE : Core to Core - 120 nF/ Km XLPE : Core to Screen - 250 nF/ Km PVC : Core to Core - 250 nF/ Km PVC : Core to Screen - 400 nF/ Km
L/R Ratio	Upto 1.0 sq.mm. : < 25 μH/Ω Upto 1.5 sq.mm. : < 40 μH/Ω Upto 2.5 sq.mm. : < 60 μH/Ω

Application

For transmitting digital and analog signals in instrumentation and control systems.



Instrumentation Cable

Part NO	Triad	Insulation Thickness (In mm)	Armour Size (In mm)	Overall Diameter (In mm)
0.5 sq.mm.				
UP070101W2	1	0.6	0.9	11.0
UP070102W2	2	0.6	0.9	14.0
UP070103W2	3	0.6	0.9	15.0
UP070104W2	4	0.6	0.9	16.0
UP070106W2	6	0.6	0.9	18.0
UP070108F2	8	0.6	4 x 0.8	20.0
UP070110F2	10	0.6	4 x 0.8	22.0
UP070112F2	12	0.6	4 x 0.8	24.0
UP070114F2	14	0.6	4 x 0.8	25.0
UP070116F2	16	0.6	4 x 0.8	26.5
UP070118F2	18	0.6	4 x 0.8	27.5
UP070124F2	24	0.6	4 x 0.8	31.5
UP070136F2	36	0.6	4 x 0.8	36.5
0.75 sq.mm.				
UP072201W2	1	0.6	0.9	11.5
UP072202W2	2	0.6	0.9	15.0
UP072203W2	3	0.6	0.9	16.0
UP072204W2	4	0.6	0.9	17.0
UP072206F2	6	0.6	4 x 0.8	19.5
UP072208F2	8	0.6	4 x 0.8	21.5
UP072210F2	10	0.6	4 x 0.8	23.5
UP072212F2	12	0.6	4 x 0.8	25.5
UP072214F2	14	0.6	4 x 0.8	27.0
UP072216F2	16	0.6	4 x 0.8	28.5
UP072218F2	18	0.6	4 x 0.8	29.5
UP072224F2	24	0.6	4 x 0.8	34.0
UP072236F2	36	0.6	4 x 0.8	39.5
1.0 sq.mm.				
UP070201W2	1	0.6	0.9	12.0
UP070202W2	2	0.6	0.9	16.0
UP070203W2	3	0.6	0.9	17.0
UP070204W2	4	0.6	0.9	18.0
UP070206F2	6	0.6	4 x 0.8	20.5
UP070208F2	8	0.6	4 x 0.8	23.0
UP070210F2	10	0.6	4 x 0.8	24.5



Instrumentation Cable

UP070212F2	12	0.6	4 x 0.8	27.0
UP070214F2	14	0.6	4 x 0.8	28.5
UP070216F2	16	0.6	4 x 0.8	30.5
UP070218F2	18	0.6	4 x 0.8	32.0
UP070224F2	24	0.6	4 x 0.8	36.5
UP070236F2	36	0.6	4 x 0.8	41.5
1.5 sq.mm.				
UP070301W2	1	0.6	0.9	12.0
UP070302W2	2	0.6	0.9	18.0
UP070303W2	3	0.6	0.9	18.0
UP070304F2	4	0.6	4 x 0.8	19.5
UP070306F2	6	0.6	4 x 0.8	22.0
UP070308F2	8	0.6	4 x 0.8	25.0
UP070310F2	10	0.6	4 x 0.8	27.5
UP070312F2	12	0.6	4 x 0.8	29.0
UP070314F2	14	0.6	4 x 0.8	31.0
UP070316F2	16	0.6	4 x 0.8	33.0
UP070318F2	18	0.6	4 x 0.8	34.5
UP070324F2	24	0.6	4 x 0.8	39.5
UP070336F2	36	0.6	4 x 0.8	45.0
2.5 sq.mm.				
UP070401W2	1	0.6	0.9	13.0
UP070402F2	2	0.6	4 x 0.8	18.5
UP070403F2	3	0.6	4 x 0.8	19.5
UP070404F2	4	0.6	4 x 0.8	21.5
UP070406F2	6	0.6	4 x 0.8	24.5
UP070408F2	8	0.6	4 x 0.8	27.0
UP070410F2	10	0.6	4 x 0.8	31.0
UP070412F2	12	0.6	4 x 0.8	32.0
UP070414F2	14	0.6	4 x 0.8	34.0
UP070416F2	16	0.6	4 x 0.8	36.0
UP070418F2	18	0.6	4 x 0.8	38.5
UP070424F2	24	0.6	4 x 0.8	44.5
UP070436F2	36	0.6	4 x 0.8	50.5

* Table 3. Armoured Instrumentation cable - Individual Triad + Overall Shielded

* Cable also available in FRLS & ZHLS sheathing. Replace 2 by S or H respectively at the end of the Part No.

* For Tinned Copper configuration add TC at the end of the Part Number



Type 4. Multi-Triad, Overall Shield

Standard

BS 5308, IS 1554, IEC 60332-1, IS 8130, IS 5831

Design

Conductor	Stranded (7 strands) Annealed Bare or Tinned Copper As per IS 8130
Insulation	PE/ XLPE
Color Code	Black - White - Red With number printing on one core of each pair
Stranding	Three cores twisted together to form a pair
Screening (Overall)	Aluminum/ Mylar Tape + ATC Drain wire
Inner Sheath	PVC ST 2 As per IS 5831 (LSZH also available)
Armouring (Optional)	SWA / Steel Strip
Outer Sheath	PVC ST2 As per IS 5831 (LSZH also available)
Outer Sheath Color	Grey RAL 7032 (Other colors available on request)



Instrumentation Cable

Characteristics

Voltage Rating	250/ 500V
Test Voltage	1500V
Temperature Rating	Fixed: -20°C to +70°C Flexing: -5°C to +70°C
Min. Bending Radius	Fixed: 12 X OD Flexing: 20 X OD
Flame Retardant	IEC 60332-1 (Optional)
Insulation Resistance (Min.)	20 MΩ X km - XLPE 5 MΩ X km - PVC
Mutual Capacitance (Max.)	XLPE : Core to Core - 120 nF/ Km XLPE : Core to Screen - 250 nF/ Km PVC : Core to Core - 250 nF/ Km PVC : Core to Screen - 400 nF/ Km
L/R Ratio	Upto 1.0 sq.mm. : < 25 μH/Ω Upto 1.5 sq.mm. : < 40 μH/Ω Upto 2.5 sq.mm. : < 60 μH/Ω

Application

For transmitting digital and analog signals in instrumentation and control systems.



Instrumentation Cable

Part NO	Triad	Insulation Thickness (In mm)	Armour Size (In mm)	Overall Diameter (In mm)
0.5 sq.mm.				
UP080101W2	1	0.6	0.9	11.0
UP080102W2	2	0.6	0.9	13.0
UP080103W2	3	0.6	0.9	14.0
UP080104W2	4	0.6	0.9	15.0
UP080106W2	6	0.6	0.9	17.0
UP080108F2	8	0.6	4 x 0.8	19.0
UP080110F2	10	0.6	4 x 0.8	21.0
UP080112F2	12	0.6	4 x 0.8	22.5
UP080114F2	14	0.6	4 x 0.8	23.5
UP080116F2	16	0.6	4 x 0.8	25.0
UP080118F2	18	0.6	4 x 0.8	26.0
UP080124F2	24	0.6	4 x 0.8	29.5
UP080136F2	36	0.6	4 x 0.8	34.0
0.75 sq.mm.				
UP082201W2	1	0.6	0.9	11.5
UP082202W2	2	0.6	0.9	14.0
UP082203W2	3	0.6	0.9	15.0
UP082204W2	4	0.6	0.9	16.0
UP082206F2	6	0.6	4 x 0.8	18.5
UP082208F2	8	0.6	4 x 0.8	20.5
UP082210F2	10	0.6	4 x 0.8	22.5
UP082212F2	12	0.6	4 x 0.8	24.0
UP082214F2	14	0.6	4 x 0.8	25.0
UP082216F2	16	0.6	4 x 0.8	26.5
UP082218F2	18	0.6	4 x 0.8	27.5
UP082224F2	24	0.6	4 x 0.8	32.0
UP082236F2	36	0.6	4 x 0.8	36.0
1.0 sq.mm.				
UP080201W2	1	0.6	0.9	11.5
UP080202W2	2	0.6	0.9	15.5
UP080203W2	3	0.6	0.9	16.0
UP080204W2	4	0.6	0.9	17.0
UP080206F2	6	0.6	4 x 0.8	19.0
UP080208F2	8	0.6	4 x 0.8	21.5
UP080210F2	10	0.6	4 x 0.8	24.0



Instrumentation Cable

UP080212F2	12	0.6	4 x 0.8	25.5
UP080214F2	14	0.6	4 x 0.8	26.5
UP080216F2	16	0.6	4 x 0.8	28.0
UP080218F2	18	0.6	4 x 0.8	29.5
UP080224F2	24	0.6	4 x 0.8	33.5
UP080236F2	36	0.6	4 x 0.8	38.5
1.5 sq.mm.				
UP080301W2	1	0.6	0.9	12.0
UP080302W2	2	0.6	0.9	16.5
UP080303W2	3	0.6	0.9	17.0
UP080304F2	4	0.6	4 x 0.8	18.0
UP080306F2	6	0.6	4 x 0.8	21.0
UP080308F2	8	0.6	4 x 0.8	23.5
UP080310F2	10	0.6	4 x 0.8	26.0
UP080312F2	12	0.6	4 x 0.8	27.5
UP080314F2	14	0.6	4 x 0.8	28.5
UP080316F2	16	0.6	4 x 0.8	31.0
UP080318F2	18	0.6	4 x 0.8	32.5
UP080324F2	24	0.6	4 x 0.8	37.0
UP080336F2	36	0.6	4 x 0.8	42.0
2.5 sq.mm.				
UP080401W2	1	0.6	0.9	13.0
UP080402W2	2	0.6	0.9	18.0
UP080403F2	3	0.6	4 x 0.8	19.0
UP080404F2	4	0.6	4 x 0.8	20.0
UP080406F2	6	0.6	4 x 0.8	23.5
UP080408F2	8	0.6	4 x 0.8	26.0
UP080410F2	10	0.6	4 x 0.8	29.0
UP080412F2	12	0.6	4 x 0.8	30.5
UP080414F2	14	0.6	4 x 0.8	32.0
UP080416F2	16	0.6	4 x 0.8	33.5
UP080418F2	18	0.6	4 x 0.8	36.0
UP080424F2	24	0.6	4 x 0.8	41.5
UP080436F2	36	0.6	4 x 0.8	47.5

* Table 4. Armoured Instrumentation cable - Overall Shielded

* Cable also available in FRLS & ZHLS sheathing. Replace 2 by S or H respectively at the end of the Part No.

* For Tinned Copper configuration add TC at the end of the Part Number

Instrumentation Cable



Type 5. Multi-Core, Overall Shield

Standard

BS 5308, IS 1554, IEC 60332-1, IS 8130, IS 5831

Design

Conductor	Stranded (7 strands) Annealed Bare or Tinned Copper As per IS 8130
Insulation	PE/ XLPE
Color Code	Grey or Black with number printing on each core
Screening (Overall)	Aluminum/ Mylar Tape + ATC Drain wire
Inner Sheath	PVC ST 2 As per IS 5831 (LSZH also available)
Armouring (Optional)	SWA / Steel Strip
Outer Sheath	PVC ST2 As per IS 5831 (LSZH also available)
Outer Sheath Color	Grey RAL 7032 (Other colors available on request)



Instrumentation Cable

Characteristics

Voltage Rating	250/ 500V
Test Voltage	1500V
Temperature Rating	Fixed: -20°C to +70°C Flexing: -5°C to +70°C
Min. Bending Radius	Fixed: 12 X OD Flexing: 20 X OD
Flame Retardant	IEC 60332-1 (Optional)
Insulation Resistance (Min.)	20 MΩ X km - XLPE 5 MΩ X km - PVC
Mutual Capacitance (Max.)	XLPE : Core to Core - 120 nF/ Km XLPE : Core to Screen - 250 nF/ Km PVC : Core to Core - 250 nF/ Km PVC : Core to Screen - 400 nF/ Km
L/R Ratio	Upto 1.0 sq.mm. : < 25 μH/Ω Upto 1.5 sq.mm. : < 40 μH/Ω Upto 2.5 sq.mm. : < 60 μH/Ω

Application

For transmitting digital and analog signals in instrumentation and control systems.



Instrumentation Cable

Part NO	Cores	Insulation Thickness (In mm)	Armour Size (In mm)	Overall Diameter (In mm)
0.5 sq.mm.				
UP090102W2	2	0.6	0.9	10.5
UP090103W2	3	0.6	0.9	11.5
UP090104W2	4	0.6	0.9	12.0
UP090106W2	6	0.6	0.9	13.0
UP090108W2	7	0.6	0.9	13.5
UP090110W2	10	0.6	0.9	15.0
UP090112W2	12	0.6	0.9	15.5
UP090114W2	14	0.6	0.9	16.0
UP090116W2	16	0.6	0.9	17.0
UP090118W2	19	0.6	0.9	18.0
UP090124F2	24	0.6	4 x 0.8	19.0
UP090136F2	37	0.6	4 x 0.8	22.0
0.75 sq.mm.				
UP092202W2	2	0.6	0.9	11.0
UP092203W2	3	0.6	0.9	12.0
UP092204W2	4	0.6	0.9	12.5
UP092206W2	6	0.6	0.9	13.5
UP092208W2	7	0.6	0.9	14.0
UP092210W2	10	0.6	0.9	15.5
UP092212W2	12	0.6	0.9	16.5
UP092214W2	14	0.6	0.9	17.0
UP092216W2	16	0.6	0.9	18.0
UP092218F2	19	0.6	4 x 0.8	19.0
UP092224F2	24	0.6	4 x 0.8	20.0
UP092236F2	37	0.6	4 x 0.8	23.0
1.0 sq.mm.				
UP090202W2	2	0.6	0.9	11.0
UP090203W2	3	0.6	0.9	12.5
UP090204W2	4	0.6	0.9	13.0
UP090206W2	6	0.6	0.9	14.0
UP090208W2	7	0.6	0.9	14.5
UP090210W2	10	0.6	0.9	16.0
UP090212F2	12	0.6	4 x 0.8	17.0
UP090214F2	14	0.6	4 x 0.8	17.5
UP090216F2	16	0.6	4 x 0.8	18.5



Instrumentation Cable

UP090218F2	19	0.6	4 x 0.8	19.5
UP090224F2	24	0.6	4 x 0.8	20.5
UP090236F2	37	0.6	4 x 0.8	23.5
1.5 sq.mm.				
UP090302W2	2	0.6	0.9	11.5
UP090303W2	3	0.6	0.9	13.0
UP090304W2	4	0.6	0.9	13.5
UP090306W2	6	0.6	0.9	14.5
UP090308W2	7	0.6	0.9	15.0
UP090310W2	10	0.6	0.9	17.0
UP090312W2	12	0.6	0.9	18.0
UP090314F2	14	0.6	4 x 0.8	19.0
UP090316F2	16	0.6	4 x 0.8	19.5
UP090318F2	19	0.6	4 x 0.8	20.5
UP090324F2	24	0.6	4 x 0.8	22.5
UP090336F2	37	0.6	4 x 0.8	26.0
2.5 sq.mm.				
UP090402W2	2	0.6	0.9	12.5
UP090403W2	3	0.6	0.9	14.0
UP090404W2	4	0.6	0.9	14.5
UP090406W2	6	0.6	0.9	16.0
UP090408W2	7	0.6	0.9	17.0
UP090410F2	10	0.6	4 x 0.8	18.5
UP090412F2	12	0.6	4 x 0.8	19.5
UP090414F2	14	0.6	4 x 0.8	20.5
UP090416F2	16	0.6	4 x 0.8	21.5
UP090418F2	19	0.6	4 x 0.8	23.0
UP090424F2	24	0.6	4 x 0.8	25.0
UP090436F2	37	0.6	4 x 0.8	29.5

* Table 5. Armoured Instrumentation cable - Multi core Overall Shielded

* Cable also available in FRLS & ZHLS sheathing. Replace 2 by S or H respectively at the end of the Part No.

* For Tinned Copper configuration add TC at the end of the Part Number

Instrumentation Cable



Type 6. Foundation Fieldbus Cable

Standard

IEC 61158-2, IEC 60228, EN 50170, IEC 60332-1

Design

Conductor	Stranded tinned or bare copper As per VDE – 0295 IEC 60228
Insulation	Special PE
Color Code	Single Pair: Orange - Blue Multi Pair: Orange - Blue with number printing on one core of each pair
Screening (Individual) for Multi Pair configuration	AL-Foil (Aluminium Foil) + ATC Drain 100% coverage + 20% overlap
Screening (overall)	AL-Foil (Aluminium Foil) + ATC Drain 100% coverage + 20% overlap
Braid (optional)	Tinned Copper Wire Braid 65% coverage
Outer Sheath	PVC (LSZH also available)
Outer Sheath Color	Orange

* This cable type is also available in armoured & multi pair configuration. Add W/F to the item code for armoured cable.



Instrumentation Cable

Characteristics

Voltage Rating	350 V
Test Voltage	1500 V
Temperature Rating	Fixed: -30°C to +70°C; Flexing: -5°C to +70°C
Min. Bending Radius	Fixed: 12 X OD; Flexing: 20 X OD
Flame Retardant	IEC 60332-1 (Optional)
Conductor Resistance (Max.)	14 AWG: 9.3 Ω/km 16 AWG: 14.9 Ω/km 18 AWG: 23.5 Ω/km 22 AWG: 56.1 Ω/km
Insulation Resistance (Min.)	5 MΩ X km
Impedance (Nom.)	100 Ω +/- 15% @ 31.25 kHz 150 Ω +/- 15% @ 1 MHz (For High Speed Type only)
Velocity of Propagation	Type A & B: 66% High Speed: 78%
Transmission Length (Max.)	Type A: 1900 m @ 31.25 kb/s Type B: 1200 m @ 31.25 kb/s High Speed: 750 m @ 1Mb/s 500 m @ 2.5 Mb/s

Application

These cables are designed for industrial fieldbus systems particularly developed for process automation and instrumentation applications.

Instrumentation Cable



Udey Pyro Part No.	No. of Pairs	Nominal OD (mm)	Attenuation (dB/ 100m)	Capacitance (pF/ m)
Type A - 18 AWG - AL Foil shielding + Drain				
UP24A1801	1	7.5	0.299 @ 0.039 MHz	78.7
UP24A1802	2	11.2	0.26 @ 0.039 MHz	78.7
UP24A1805	5	13.9	0.26 @ 0.039 MHz	78.7
UP24A1808	8	17	0.26 @ 0.039 MHz	78.7
UP24A1812	12	20.5	0.26 @ 0.039 MHz	78.7
UP24A1816	16	23.5	0.26 @ 0.039 MHz	78.7
UP24A1820	20	26	0.26 @ 0.039 MHz	78.7
UP24A1824	24	29	0.26 @ 0.039 MHz	78.7
UP24A1850	50	41	0.26 @ 0.039 MHz	78.7
Type A - 16 AWG - AL Foil shielding + Drain				
UP24A1601	1	10.2	0.26 @ 0.039 MHz	78.7
UP24A1602	2	14.8	0.26 @ 0.039 MHz	78.7
UP24A1605	5	19.1	0.26 @ 0.039 MHz	78.7
UP24A1608	8	23.1	0.26 @ 0.039 MHz	78.7
UP24A1612	12	28.9	0.26 @ 0.039 MHz	78.7
UP24A1616	16	31.3	0.26 @ 0.039 MHz	78.7
UP24A1620	20	35.3	0.26 @ 0.039 MHz	78.7
UP24A1624	24	39.4	0.26 @ 0.039 MHz	78.7
Type A - 18 AWG - AL Foil shielding + Drain - ATC Braid				
UP24A1801C	1	7.2	0.299 @ 0.039 MHz	78.7
Type A - 16 AWG - AL Foil shielding + Drain - ATC Braid				
UP24A1601C	1	8.7	0.299 @ 0.039 MHz	78.7
Type A - 14 AWG - AL Foil shielding + Drain - ATC Braid				
UP24A1401C	1	10.9	0.299 @ 0.039 MHz	78.7
Type B - 22 AWG - AL Foil shielding + Drain				
UP24A2201	1	5.0	0.299 @ 0.039 MHz	77.1
High Speed - 22 AWG - AL Foil shielding + Drain				
UP24A2201H	1	9.0	0.649 @0.25 MHz 1.00 @ 0.625 MHz 1.30 @1.250 MHz 2.00 @3.125 MHz	27.9

* The information mentioned in this document is for guidance only and is subjected to change without notice or liability. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.