







## JOHNSON GOLD

## 3 CORE SUBMERSIBLE FLAT CABLES (DOUBLE INSULATED)

TYPES OF CABLES : SUBMERSIBLE FLEXIBLE FLAT CABLE (DOUBLE INSULATED)

DESIGNATION : DOUBLE INSULATED WITH XLPE OVER PVC TYPE CAND ST 2 HR PVC SHEATHED FLAT FLEXIBLE EC GRADE

COPPER CABLES

CABLE DESIGN:

COPPER CONDUCTOR: ANNEALED COPPER WITH FLEXIBLE BUNCH EC GRADE COPPER AS PER CLASS 2 OR 5 (IS 8130, IEC 60228)

INSULATION : CROSS LINKED POLYETHYLENE (XLPE)

INNER SHEATH : REDUCED THERMAL EXPANSION WITH MODIFIED PVC TYPE C (OVER XLPE INSULATION CORE)

SHEATH : HEAT & MOISTURE RESISTANCE TYPE ST-2 HR PVC (AS PER IS 5831)

MECHANICAL PROPERTY (INSULATION-XLPE):

TENSILE STRENGTH : 12.5 N/MM2 (Min.)

ELONGATION : 200% (Min.)

MECHANICAL PROPERTY (SHEATH-ST 2 HR PVC):

TENSILE STRENGTH: 12.5 N/MM2 (Min.)

ELONGATION: 150% (Min.)

**TEMP. RANGE** : (-20° C to + 90° C)

TEST VOLTAGE : 3 KV FOR 5 MINUTE (ELECTRICAL PROPERTY)

VOLUME RESISTIVITY INSULATION (ELECTRICAL PROPERTY)

 $1 \times 10^{14}$  (Min.)  $\Omega$ -cm AT 27 ° C TEMP.  $1 \times 10^{12}$  (Min.)  $\Omega$ -cm AT 90 ° C TEMP.

REF. STD : IS 694, IS 8130, IS 5831, IS 7098 P-1, IEC 60228

RATED VOLTAGE : 1100 V SHEATH COLOUR : GRAY

CORE COLOR DOUBLE INSULATED: RED, YELLOW, BLUE

INSULATION (XLPE) : JOHNSON CABLES MAKE THREE CORE FLAT CABLES ARE BEST SUITED FOR SUBMERSIBLE APPLICATION AND

MANUFACTURED WITH CONDUCTOR USING ANNEALED COPPER WIRES OF ELECTROLYTIC GRADE, BUNCHED PROPERLY TO ENSURED DESIRED FLEXIBILITY. THE CONDUCTOR IS FURTHER INSULATED WITH THERMOSET TYPE CROSS LINKED POLYETHYLENE (XLPE) INSULATION WITH UNIFORM THICKNESS WITH EACH OF THE CORE COLORS IN RED, YELLOW AND BLUE BY USING MOST MODERN MACHINERY AND EXTRUSION

TECHNIQUES.

SHEATH (ST 2 HR PVC) : THE SHEATH WITH UNIFORM THICKNESS OF HEAT AND MOISTURE RESISTANCE TYPE PVC GRADE ST 2 HR PVC

COMPOUND FORMULATED AND MANUFACTURED IN HOUSE, IS EXTRUDED OVER THESE COLORED IN A FLAT

FORMATION. THE COLOR OF THE SHEATH IS GRAY.

CABLES FEATURES : - HIGHER CURRENT RATING.

HIGHER OVERLOAD CAPACITYHIGHER SHORT CIRCUIT RATING

LOWER DI-ELECTRIC CONSTANT AND POWER FACTOR
 BETTER IMPACT, ABRASION, CORROSION RESISTANCE

- VERY GOOD CURRENT CARRYING CAPACITY

- THE CABLES ARE AVAILABLE PROGRESSIVE SEQUENTIAL MARKING, COMPANY NAME AND SIZE PRINTED

ON SHEATH

APPLICATION : THESE CABLES ENJOY LONGER AND TROUBLE FREE LIFE ARE IDEALLY SUITABLE FOR GIVING THE POWER

CONNECTION IN SUBMERSIBLE PUMP MOTORS USED. MAINLY FOR AGRICULTURE PURPOSE.

ISO CERTIFICATION : ISO 9001:2015, RoHs, ISO 14001:2015, ISO 45001:2018, CE

PRODUCT CERTIFICATION: IS 694:2010, IS 7098P-1, TUV RHEINLAND CERTIFICATE No. R 60160536

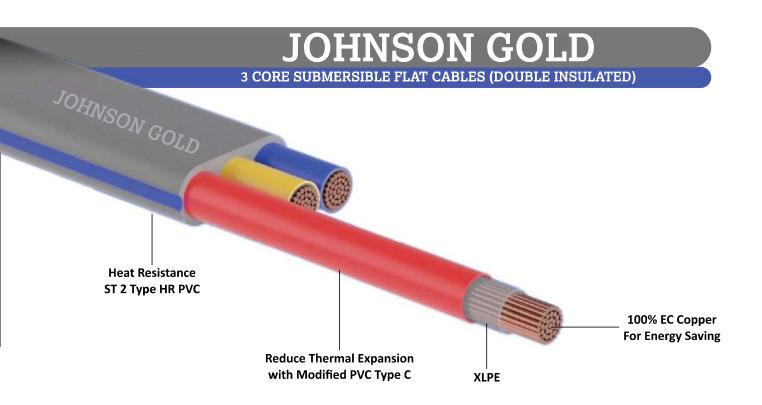












## **TECHNICAL DETAILS FOR JOHNSON CABLES 1.1 KV**

JOHNSON GOLD - 3 CORE FLAT CABLES									
SIZE	CABLE	CLASS OF CONDUCTOR	NOS. & DIA OF WIRE/Nom (MAX.)	NOM. INSULATION THICKNESS	NOM. SHEATH THICKNESS	APPROX OVERALL DIMENSION (MM)		MAX. D.C C.R @ 20° C (COPPER)	MAX. CURRENT CARRING CAPACITY
mm²	TYPE	CLASS	Nos./mm	mm	mm	WIDTH	HEIGHT	Ω/km	AMPS
3C X 1.5	FLAT -2XY-Y	CLASS 2	22/0.3	0.70	1.10	13.40	6.00	12.1	19
3C X 2,5	FLAT -2XY-Y	CLASS 2	36/0.3	0.70	1,15	14,40	6.40	7.41	24
3C X 4	FLAT -2XY-Y	CLASS 5	56/0.3	0.70	1.20	17.60	7.60	4.95	35
3C X 6	FLAT -2XY-Y	CLASS 5	84/0.3	0.70	1.30	19.60	8.40	3.30	42
3C X 8	FLAT -2XY-Y	CLASS 5	112/0.3	0.70	1.40	21.90	9.30	2.48	49
3C X 10	FLAT -2XY-Y	CLASS 5	140/0.3	0.70	1.60	23.70	10.10	1.91	56
3C X 12	FLAT -2XY-Y	CLASS 5	168/0.3	0.70	1.60	26.10	10.90	1.61	65
3C X 16	FLAT -2XY-Y	CLASS 5	224/0.3	0.70	1.80	28.00	11.80	1.21	75
3C X 25	FLAT -2XY-Y	CLASS 5	354/0.3	0.90	2.20	34.80	14.60	0.780	105
3C X 35	FLAT -2XY-Y	CLASS 5	495/0.3	0.90	2.40	38.80	16.20	0.554	130
3C X 50	FLAT -2XY-Y	CLASS 5	703/0.3	1.00	2.70	44.80	18.60	0.386	160

## NOTE:

- THE NUMBER OF STRAND & STRANDS DIAMETER SHALL BE SUCH THAT IT MEETS THE CONDUCTOR RESISTANCE AS PER RELEVANT STANDARD.
- THE ABOVE DATA IS INDICATIVE AND MAY BE REVISED WITHOUT PRIOR INFORMATION. JOHNSON CABLES WILL NOT BE LIABLE FOR ANY DAMAGES ARISING OUT OF IN CORRECT APPLICATION.
- TOLERANCE: UP TO 4.0 SQ MM +/- 0.5 MM. 6.0 SQ MM & 10 SQ MM +/- 1.0 MM AND ABOVE 10 SQ MM +/- 1.2 MM

