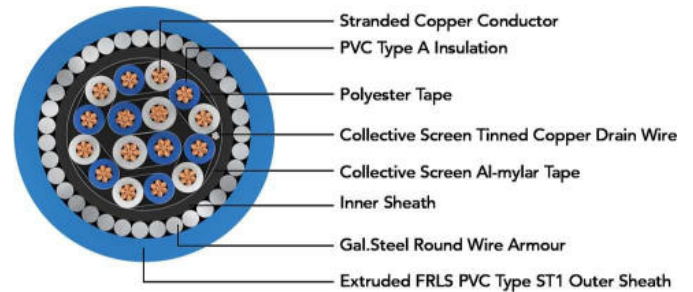


INSTRUMENTATION CABLE • INSTRU 300 P (ST) • 300 V

INDOCABLES INSTRU 300 P (ST)

INSTRUMENTATION CABLE, PVC/PE INSULATED, OVERALL SHIELDED — EN 50288-7

VOLTAGE RATING 300 V	STANDARD EN 50288-7	CONDUCTOR 0.5 – 1.5 mm²	PAIRS 1 – 37	BENDING RADIUS 12 × OD
--------------------------------	-------------------------------	--	------------------------	----------------------------------



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES INSTRU 300 SINGLE & MP, Stranded copper conductor, PVC/PE insulated, Overall, al-mylar shielded, armoured/unarmoured and PVC/LSZH sheathed cable confirming to BS EN 50288-7 are designed for transmission of analogue and digital signals in instrument and control systems. INDOCABLES INSTRU 300 SINGLE & MP cables are used for diverse applications within industrial process for control, communication, data & voice transmission in oil, gas & petrochemical industries, cement, steel, fertilizers etc.

CONSTRUCTION

- 01 Stranded Copper conductor as per EN 60228
- 02 Insulated with PVC/PE as per EN 50288-7
- 03 Collective screen Al/PET (Aluminium/Polyester tape) with drain wire of tinned Cu/Tinned copper braiding
- 04 Extruded inner sheath with PVC/LSZH to EN 50290-2-22/27
- 05 Armoured with Galvanised Steel Strip/Round as per EN 50288-7
- 06 Sheathed with Extruded PVC/LSZH to EN 50290-2-22/27

CHARACTERISTICS

Voltage Rating	300 V
Operation Temperature	Max.: PVC 70°C, HRPVC 85°C, XLPE 90°C, LDPE 60°C.
Bending Radius	12 x Overall diameter

CORE IDENTIFICATION

Core	White & Blue for Pair
Outer sheath colour	Black/Blue


ISO 9001
 Cert. 99 100 22646 (TÜV SÜD)

ISI
 BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
 Compliant

REACH
 Compliant

Make in India
 Manufactured in India

STANDARD FOLLOWS

EN 50288-7

EN 50288-1

EN 60228

EN 50290-2-22/27

COMPLIANCEConductor resistance
EN 60228Insulation resistance
EN 50288-7L/R Ratio
EN 50288-7Mutual capacitance
EN 50288-7**NOTES**

- Outer sheath also available with PE & FRLS on request.
- As per the application/identification requirement, other colour also available on request.

**ISO 9001**
Cert. 99 100 22646 (TÜV SÜD)**ISI**
BIS CM/L 6200267409 (IS 7098 Pt-1)**RoHS**
Compliant**REACH**
Compliant**Make in India**
Manufactured in India



ORDERING & ITEM CODE

PART-REGISTERED

The item master registers overall-screened (OSCR) pair codes for 1/2/4/6/8/12/16/24 pairs in 0.5–1.5 sq mm — shown in dark. The remaining pair counts (5/10/18/19/20/30/37) are derived from the same structure and carry no item ID until the Item Master Steward registers them.

CODE STRUCTURE

IC · IN · PAIRS · SIZE · TC · PE · DESIGNATION · 0300 · EN50288P7 · 0SCR

IN Instrumentation line	PAIRS · SIZE Pair count + P, sq.mm × 100	TC · PE Tinned copper, PE insulated	2YY · 2YWY Unarmoured · round wire armoured	Ø300 · ØSCR 300 V, overall screened
----------------------------	---	--	---	--

SIZE	PAIRS	UNARMOURD · 2YY	ARMOURD · 2YWY	
0.5	1	IC-IN-1P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-1P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	2	IC-IN-2P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-2P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	4	IC-IN-4P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-4P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	5	IC-IN-5P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-5P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	6	IC-IN-6P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-6P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	8	IC-IN-8P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-8P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	10	IC-IN-10P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-10P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	12	IC-IN-12P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-12P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	16	IC-IN-16P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-16P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	18	IC-IN-18P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-18P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	19	IC-IN-19P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-19P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	20	IC-IN-20P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-20P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	24	IC-IN-24P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-24P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
	30	IC-IN-30P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-30P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR	
37	IC-IN-37P-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-37P-00050-TC-PE-2YWY-0300-EN50288P7-0SCR		
0.75	1	IC-IN-1P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-1P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	2	IC-IN-2P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-2P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	4	IC-IN-4P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-4P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	5	IC-IN-5P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-5P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	6	IC-IN-6P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-6P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	8	IC-IN-8P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-8P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	10	IC-IN-10P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-10P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	12	IC-IN-12P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-12P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	16	IC-IN-16P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-16P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	18	IC-IN-18P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-18P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	19	IC-IN-19P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-19P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	
	20	IC-IN-20P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-20P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR	



ISO 9001

Cert. 99 100 22646 (TÜV SÜD)



ISI

BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS

Compliant

REACH

Compliant



Make in India

Manufactured in India

	24	IC-IN-24P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-24P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	30	IC-IN-30P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-30P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	37	IC-IN-37P-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-37P-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
1.0	1	IC-IN-1P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-1P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	2	IC-IN-2P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-2P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	4	IC-IN-4P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-4P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	5	IC-IN-5P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-5P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	6	IC-IN-6P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-6P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	8	IC-IN-8P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-8P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	10	IC-IN-10P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-10P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	12	IC-IN-12P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-12P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	16	IC-IN-16P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-16P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	18	IC-IN-18P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-18P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	19	IC-IN-19P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-19P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	20	IC-IN-20P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-20P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	24	IC-IN-24P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-24P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	30	IC-IN-30P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-30P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
	37	IC-IN-37P-00100-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-37P-00100-TC-PE-2YWY-0300-EN50288P7-0SCR
1.5	1	IC-IN-1P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-1P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	2	IC-IN-2P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-2P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	4	IC-IN-4P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-4P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	5	IC-IN-5P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-5P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	6	IC-IN-6P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-6P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	8	IC-IN-8P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-8P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	10	IC-IN-10P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-10P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	12	IC-IN-12P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-12P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	16	IC-IN-16P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-16P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	18	IC-IN-18P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-18P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	19	IC-IN-19P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-19P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	20	IC-IN-20P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-20P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	24	IC-IN-24P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-24P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	30	IC-IN-30P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-30P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR
	37	IC-IN-37P-00150-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-37P-00150-TC-PE-2YWY-0300-EN50288P7-0SCR

Sizes and pair counts follow the weight & dimension table. PVC-insulated, strip-armoured and LSZH-sheathed variants use the same structure with the corresponding insulation and designation segments.



WEIGHT & DIMENSION DATA

300 VOLTS, SINGLE & MULTI PAIR, STR.COPPER, PVC/PE INSULATED, ALUMINIUM MYLAR TAPED OVERALL SHIELDED, ARMOURED AND UNARMOURED
INSTRUMENTATION CABLES AS PER EN 50288-7

AREA OF CONDUCTOR 0.5 SQ MM Min. thickness of insulation 0.26 mm

Min. thickness of insulation 0.26 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF PAIRS	INNER SHEATH MM	G.I. ARMOUR WIRE MM	DIA. OVER ARMOUR MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.8	0.9	6.99	9.6	175	180	0.8	5.2	35	37
2	0.9	0.9	9.37	12.0	255	260	0.9	7.6	60	64
4	0.9	0.9	10.54	13.4	315	320	0.9	8.8	89	97
5	1.0	0.9	11.52	14.4	355	365	1.0	9.8	110	120
6	1.0	0.9	12.35	15.2	395	405	1.0	10.6	125	135
8	1.0	0.9	13.61	16.5	450	465	1.0	11.9	155	170
10	1.1	0.9	15.34	18.4	530	550	1.1	13.6	195	215
12	1.1	0.9	15.79	18.8	580	600	1.1	14.0	220	245
16	1.1	0.9	17.29	20.3	660	690	1.1	15.5	280	305
18	1.1	0.9	18.13	21.2	710	740	1.1	16.4	305	340
19	1.1	0.9	18.13	21.2	720	760	1.1	16.4	320	355
20	1.2	0.9	19.25	22.5	790	820	1.2	17.5	345	380
24	1.2	1.25	21.82	25.1	1020	1060	1.2	19.4	405	445
30	1.3	1.25	23.16	26.4	1150	1200	1.3	20.7	490	550
37	1.3	1.25	24.81	28.3	1310	1380	1.3	22.4	590	650

AREA OF CONDUCTOR 0.75 SQ MM Min. thickness of insulation 0.26 mm

Min. thickness of insulation 0.26 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF PAIRS	INNER SHEATH MM	G.I. ARMOUR WIRE MM	DIA. OVER ARMOUR MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.8	0.9	7.41	10.1	190	195	0.8	5.7	42	44
2	0.9	0.9	10.05	12.9	290	295	0.9	8.3	73	78
4	1.0	0.9	11.57	14.4	365	375	1.0	9.8	120	125
5	1.0	0.9	12.45	15.3	410	420	1.0	10.7	140	150
6	1.0	0.9	13.39	16.2	455	465	1.0	11.6	160	175
8	1.1	0.9	15.0	18.0	540	560	1.1	13.2	210	225
10	1.1	0.9	16.72	19.8	620	650	1.1	15	255	275
12	1.1	0.9	17.22	20.3	680	700	1.1	15.5	290	315
16	1.2	0.9	19.11	22.4	810	850	1.2	17.4	375	410
18	1.2	1.25	20.75	24.0	1000	1040	1.2	18.3	415	455
19	1.2	1.25	20.75	24.0	1020	1060	1.2	18.3	435	475
20	1.2	1.25	21.79	25.0	1070	1110	1.2	19.3	455	500
24	1.3	1.25	24.01	27.5	1240	1290	1.3	21.6	550	600
30	1.4	1.25	25.57	29.0	1410	1470	1.4	23.1	670	730
37	1.4	1.25	27.42	30.9	1600	1680	1.4	25	800	880

AREA OF CONDUCTOR 1.0 SQ MM

Min. thickness of insulation 0.26 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF PAIRS	INNER SHEATH MM	G.I. ARMOUR WIRE MM	DIA. OVER ARMOUR MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.8	0.9	7.77	10.4	205	210	0.8	6.0	49	51
2	0.9	0.9	10.65	13.5	315	320	0.9	8.9	86	91
4	1.0	0.9	12.28	15.1	405	415	1.0	10.5	145	150
5	1.0	0.9	13.24	16.1	455	465	1.0	11.5	170	180
6	1.0	0.9	14.27	17.1	510	520	1.0	12.5	195	210
8	1.1	0.9	16.02	19.1	610	630	1.1	14.3	255	275
10	1.1	0.9	17.90	20.9	710	740	1.1	16.1	310	335
12	1.2	0.9	18.65	21.7	780	810	1.2	16.9	365	395
16	1.2	1.25	21.20	24.4	1060	1100	1.2	18.7	465	510
18	1.2	1.25	22.23	25.5	1140	1190	1.2	19.8	520	560
19	1.2	1.25	22.23	25.5	1170	1210	1.2	19.8	540	590
20	1.3	1.25	23.6	26.8	1250	1290	1.3	21.1	580	630
24	1.3	1.25	25.9	29.3	1430	1490	1.3	23.4	680	740
30	1.4	1.25	27.5	30.9	1630	1700	1.4	25.0	840	910
37	1.5	1.25	29.7	33.3	1900	1990	1.5	27.2	1020	1110

AREA OF CONDUCTOR 1.5 SQ MM

Min. thickness of insulation 0.35 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF PAIRS	INNER SHEATH MM	G.I. ARMOUR WIRE MM	DIA. OVER ARMOUR MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.9	0.9	8.97	11.6	255	260	0.9	7.2	67	71
2	1.0	0.9	12.49	15.3	390	400	1.0	10.7	120	130
4	1.1	0.9	14.47	17.5	530	540	1.1	12.7	205	220
5	1.1	0.9	15.66	18.7	590	610	1.1	13.9	245	260
6	1.1	0.9	16.93	20.0	660	680	1.1	15.2	285	305
8	1.2	0.9	19.04	22.3	810	830	1.2	17.3	370	400
10	1.3	1.25	22.28	25.5	1090	1120	1.3	19.8	460	495
12	1.3	1.25	22.96	26.4	1200	1240	1.3	20.5	530	580
16	1.4	1.25	25.45	28.9	1430	1490	1.4	23.0	690	750
18	1.4	1.25	26.70	30.20	1540	1610	1.4	24.3	770	830
19	1.4	1.25	26.70	30.20	1580	1650	1.4	24.3	800	870
20	1.5	1.25	28.30	32.0	1690	1770	1.5	25.9	850	930
24	1.5	1.25	31.2	34.8	1930	2020	1.5	28.7	1010	1100
30	1.6	1.6	33.8	37.7	2440	2550	1.6	30.7	1240	1350
37	1.7	1.6	36.5	40.6	2820	2960	1.7	33.4	1510	1640

For Cables of sizes or pairs not listed above the product data is available on request Dimensions & Weights are representative figures and may vary

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

ISI
BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India

ELECTRICAL PARAMETER

AREA OF CONDUCTOR	MAX. DC RESISTANCE AT 20°C — PLAIN WIRES	MAX. DC RESISTANCE AT 20°C — METAL COATED WIRES	INSULATION RESISTANCE (PVC)	INSULATION RESISTANCE (PE/XLPE)	MUTUAL CAPACITANCE	L/R RATIO
Sq. mm	Ohm/km	Ohm/km	MΩ/Km	MΩ/Km	nF/Km	μH/Ω
0.5	36	36.7	10	1000	< 250	< 25
0.75	24.5	24.8	10	1000	< 250	< 25
1	18.1	18.2	10	1000	< 250	< 25
1.5	12.1	12.2	10	1000	< 250	< 40
2.5	7.41	7.56	10	1000	< 250	< 60

OUTSTANDING FEATURES



FLAME RETARDANT



LOW SMOKE EMISSION



LONG LIFE