

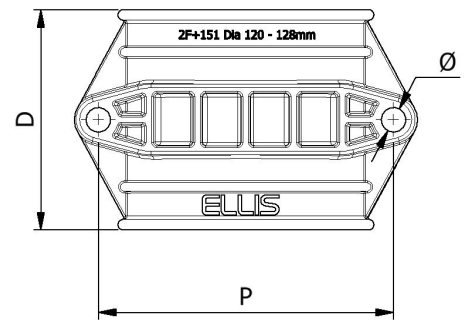
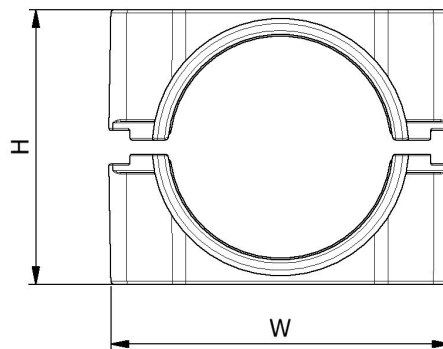
# ELLIS

Holding Power

## DATA SHEET

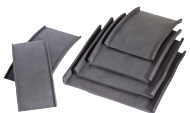
## 2F+ CLAMPS

- 2 HOLE CLAMPS MANUFACTURED IN LSF NYLON OR STANDARD POLYPROPYLENE
- ROBUST DESIGN OFFERS GOOD RESISTANCE TO CABLE FORCES
- CLAMPING RANGE OF  $\phi 32 - \phi 168$ MM ACHIEVED ACROSS 18 SIZES
- SHORT CIRCUIT AND MECHANICALLY TESTED TO IEC 61914
- FIXINGS ARE NOT SUPPLIED AS STANDARD BUT CAN BE SUPPLIED ON REQUEST



PART NO.	CABLE RANGE		LINER THICKNESS (mm)	CABLE RANGE WITH LINER		DIMENSIONS (mm)					WEIGHT (g)		AXIAL LOAD		LATERAL LOAD - HORIZONTAL		LATERAL LOAD - VERTICAL	
	MIN $\phi$ (mm)	MAX $\phi$ (mm)		MIN $\phi$ (mm)	MAX $\phi$ (mm)	W	H	D	P	$\phi$	LSF	B	LSF	B	LSF	B	LSF	B
2F+07	38	46	3	32	40	92	68	54	68	2 x M10	91	73	200N	150N	1.75kN	1.5kN	15kN	4kN
2F+08	46	51	3	40	45	103	76	54	79	2 x M10	110	81	200N	150N	1.75kN	1.5kN	15kN	4kN
2F+09	51	57	3	45	51	103	82	54	79	2 x M10	119	95	200N	150N	1.75kN	1.5kN	15kN	4kN
2F+10	57	64	3	51	58	103	89	54	79	2 x M10	123	89	200N	150N	1.75kN	1.5kN	15kN	4kN
2F+11	64	70	3	58	64	130	95	54	106	2 x M10	157	116	200N	150N	1.75kN	1.5kN	15kN	4kN
2F+1200	70	76	4	62	68	128	101	75	104	2 x M10	190	160	500N	500N	5kN	1.5kN	15kN	6kN
2F+1201	76	83	4	68	75	135	107	75	111	2 x M10	207	174	500N	500N	5kN	1.5kN	15kN	6kN
2F+1202	83	90	4	75	82	143	115	75	119	2 x M10	229	188	500N	500N	5kN	1.5kN	15kN	6kN
2F+131	90	97	5	80	87	165	122	100	138	2 x M12	423	336	2kN	700N	5kN	3kN	18.5kN	10kN
2F+132	97	105	5	87	95	171	130	100	144	2 x M12	441	355	2kN	700N	5kN	3kN	18.5kN	10kN
2F+141	105	112	5	95	102	178	137	100	151	2 x M12	510	382	2kN	700N	5kN	3kN	18.5kN	10kN
2F+142	112	120	5	102	110	187	146	125	160	2 x M12	622	496	2kN	1.3kN	5kN	4.5kN	18.5kN	8kN
2F+151	120	128	5	110	118	196	156	125	168	2 x M12	716	537	2kN	1.3kN	5kN	4.5kN	18.5kN	8kN
2F+152	128	135	5	118	125	203	165	125	176	2 x M12	772	579	2kN	1.3kN	5kN	4.5kN	18.5kN	8kN
2F+161	135	144	5	125	134	222	177	150	190	2 x M16	1109	831	2.5kN	2kN	30kN	8kN	40kN	15kN
2F+162	144	152	5	134	142	232	187	150	200	2 x M16	1203	902	2.5kN	2kN	30kN	8kN	40kN	15kN
2F+171	152	160	5	142	150	242	198	150	210	2 x M16	1302	976	2.5kN	2kN	30kN	8kN	40kN	15kN
2F+172	160	168	5	150	158	252	209	150	220	2 x M16	1403	1052	2.5kN	2kN	30kN	8kN	40kN	15kN

A CLAMP MANUFACTURED IN LONDON UNDERGROUND APPROVED MATERIAL CAN BE SUPPLIED ON REQUEST. CONTACT ELLIS FOR FURTHER DETAILS.



FOR THE LINERED VERSION ADD 'L' AS A SUFFIX TO THE PART NO. E.G. '2F+07LSFL'.

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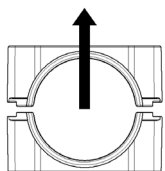
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## TESTING SUMMARY

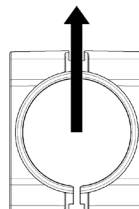
2F+ Clamps have been tested in line with the International Standard 'Cable Cleats for Electrical Installations' IEC 61914:2015. Typical results are detailed below, please note that these testing values are maximums and safety factors appropriate to your application should be used:

PROPERTY	CLASSIFICATION CLAUSE IEC 61914	UNITS / CLASSIFICATION	TEST DATA
CLEAT TYPE	6.1, 6.1.3	POLYMERIC	-
TEMP. FOR PERMANENT APPLICATION	6.2	°C	LSF: -40 - 60 B: -40 - 40
UV RESISTANCE	6.5.1.2	XENON ARC METHOD A	PASS
IMPACT RATING	6.35	VERY HEAVY	PASS
FLAME PROPAGATION TEST	10.0, 10.1	APPLICATION TIME $\geq 30s$	LSF: PASS B: NOT COMPLIANT
AXIAL LOAD RATING	6.4.3, 9.4	NEWTONS (N)	REFER TO THE DATA TABLE ON PAGE 1
LATERAL LOAD RATING	6.4.2, 9.3	NEWTONS (N)	REFER TO THE DATA TABLE ON PAGE 1
RESISTANCE TO ELECTROMECHANICAL FORCE (SHORT CIRCUIT TESTING)	6.4, 6.4.5, 9.5	2F+07LSF CLEATS AT 600MM INTERVALS (WITHSTANDING ONE SHORT CIRCUIT)	80.2kA (REPORT No. PDL-17.137.3)  CABLE OD= $\varnothing 36mm$ PHASE SPACING = 100mm
RESISTANCE TO ELECTROMECHANICAL FORCE (SHORT CIRCUIT TESTING)	6.4, 6.4.5, 9.5	2F+142LSF CLEATS AT 1M INTERVALS (WITHSTANDING MORE THAN ONE SHORT CIRCUIT)	113kA (REPORT No. PDL-15.025.1) (BASED ON IEC 61914: 2009)  CABLE OD= $\varnothing 117mm$ PHASE SPACING = 200mm

The test data provided above is for the standard version only, for test data with the liner option please contact Ellis.



LATERAL LOAD 'VERTICAL' DIRECTION



LATERAL LOAD 'HORIZONTAL DIRECTION'

### LONDON UNDERGROUND

The LUL version of 2F+ Clamps are compliant with the requirements of LUL-1085. Product register number 364.

This data sheet is subject to change without notice. The information provided has been generated in laboratory conditions, as such results in use may vary.