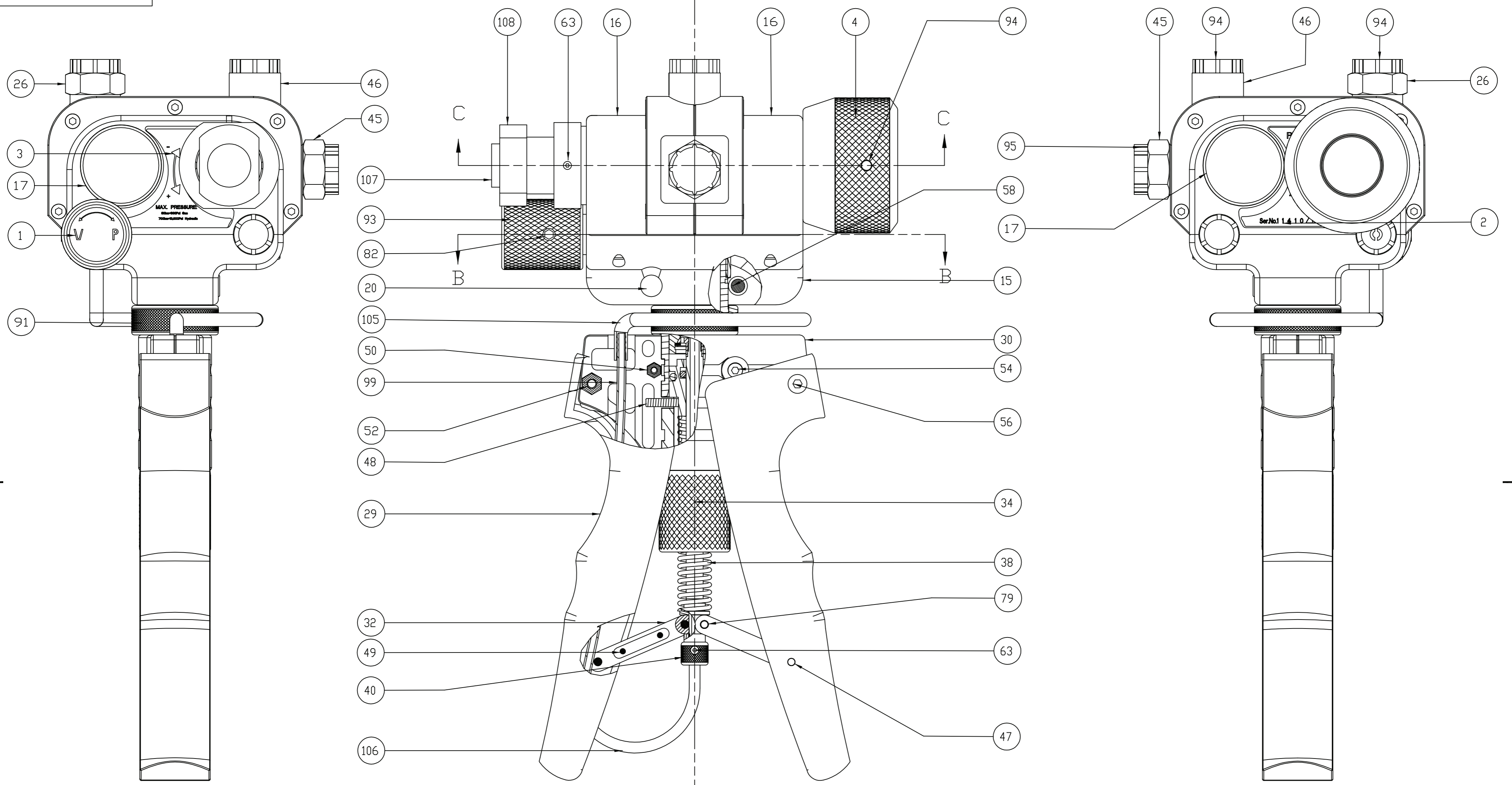



8400

1 OF 4




Note:

SPECIFICATION
 PNEUMATIC: VACCUUM 95%, PRESSURE 60 BAR
 HYDRAULIC: PRESSURE 700 BAR
 PRESSURE PORTS: 1/4 BSP OR 1/4 NPT
 100cc HYDRAULIC RESERVOIR PV411-117 NOT SHOWN

IN ACCORDANCE WITH BS8888:2004  and DC0058

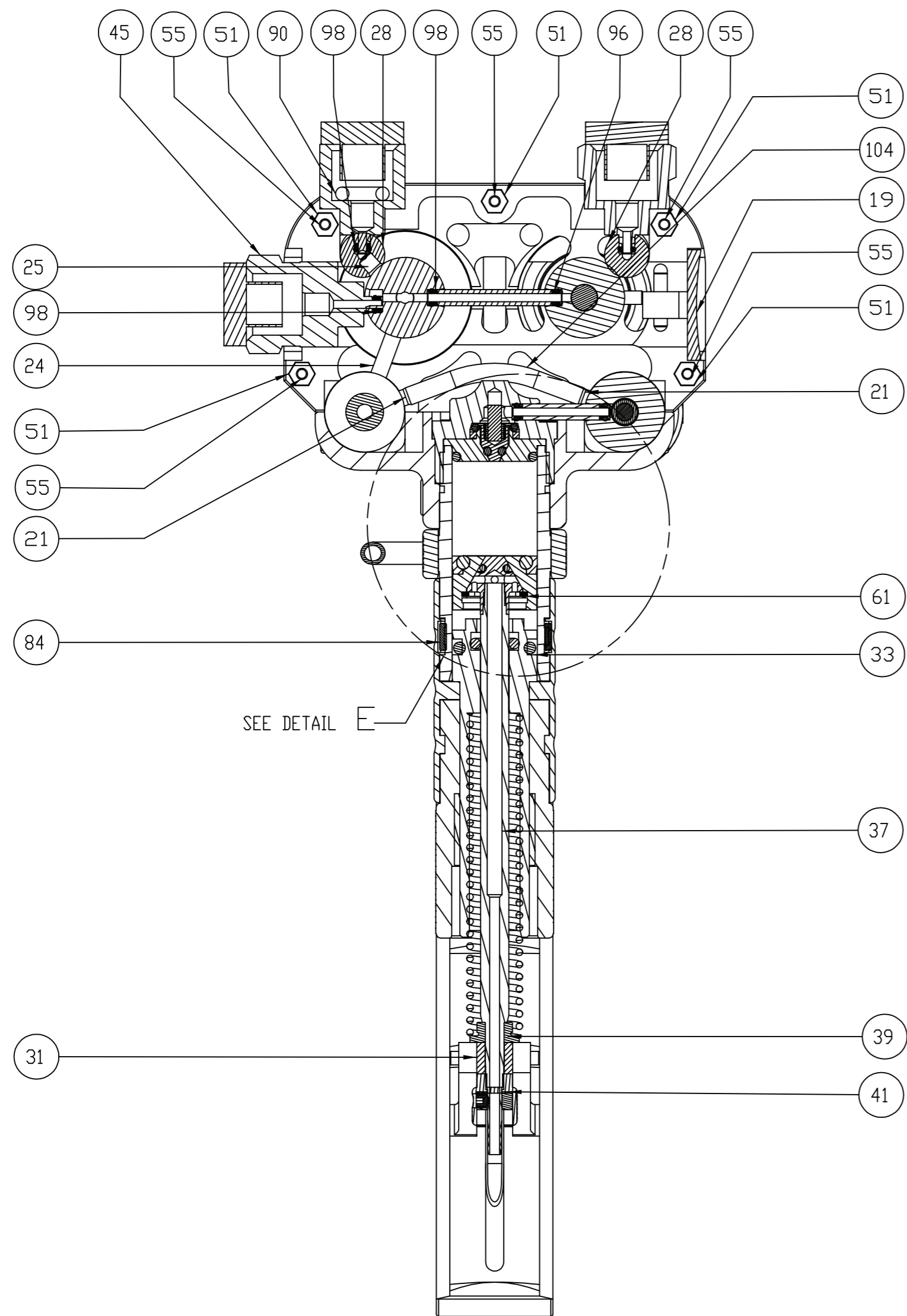
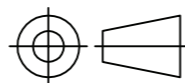
RUN MFG PROGRAM 13.6 (BM37) TO OBTAIN THE
 REQUIRED PRODUCT STRUCTURE (BOM/PARTS LISTING)

1P-8400		PV411A COMMON PARTS	
PART NO.		DESCRIPTION, MATERIAL, REMARKS ETC.	
VERSION			DIMENSIONS IN mm U.O.S.
ISSUE	1		GEN TOL ±0.2 U.O.S.
DATE	24.02.11	DRUCK LTD. LEICESTER, LE6 0FH, UK.	ANGLES ±5° U.O.S.
DRAWN	B.KNIGHT	TEL: +44 (0)116 2317100	Holes TO BS4500 Pt1 H12 U.O.S.
CHKD	S.REES	TITLE: GENERAL ARRANGEMENT	
MANUF	M.FLETCHER	PV411A MULTI-FUNCTION HAND PUMP	
APPD	C.GUTTRIDGE	DRG. No 8400	SHT 1 OF 4

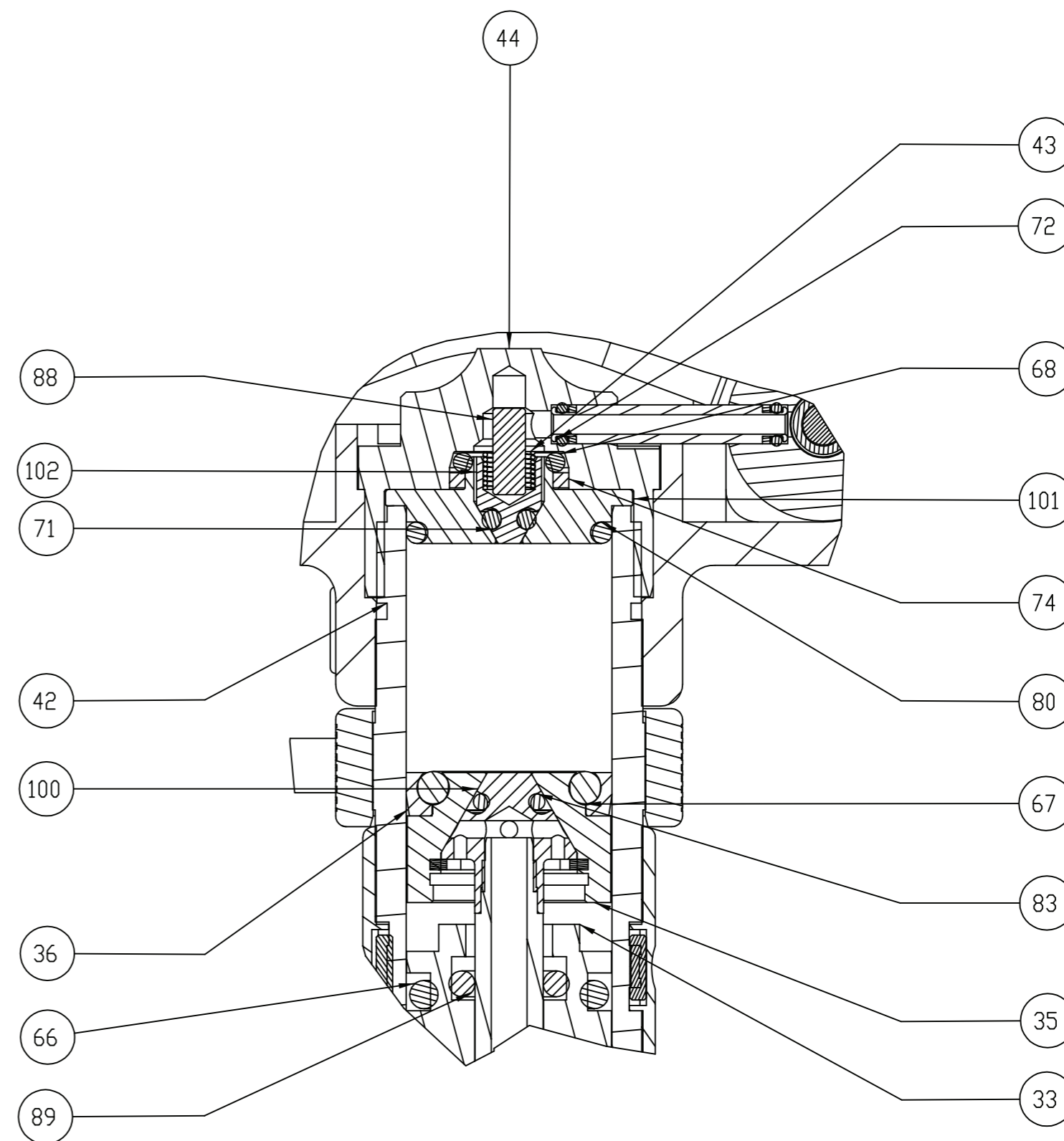
AUTOCAD DRAWING

8400

2 □F 4



SECTION A-A



DETAIL E
SCALE 2:1

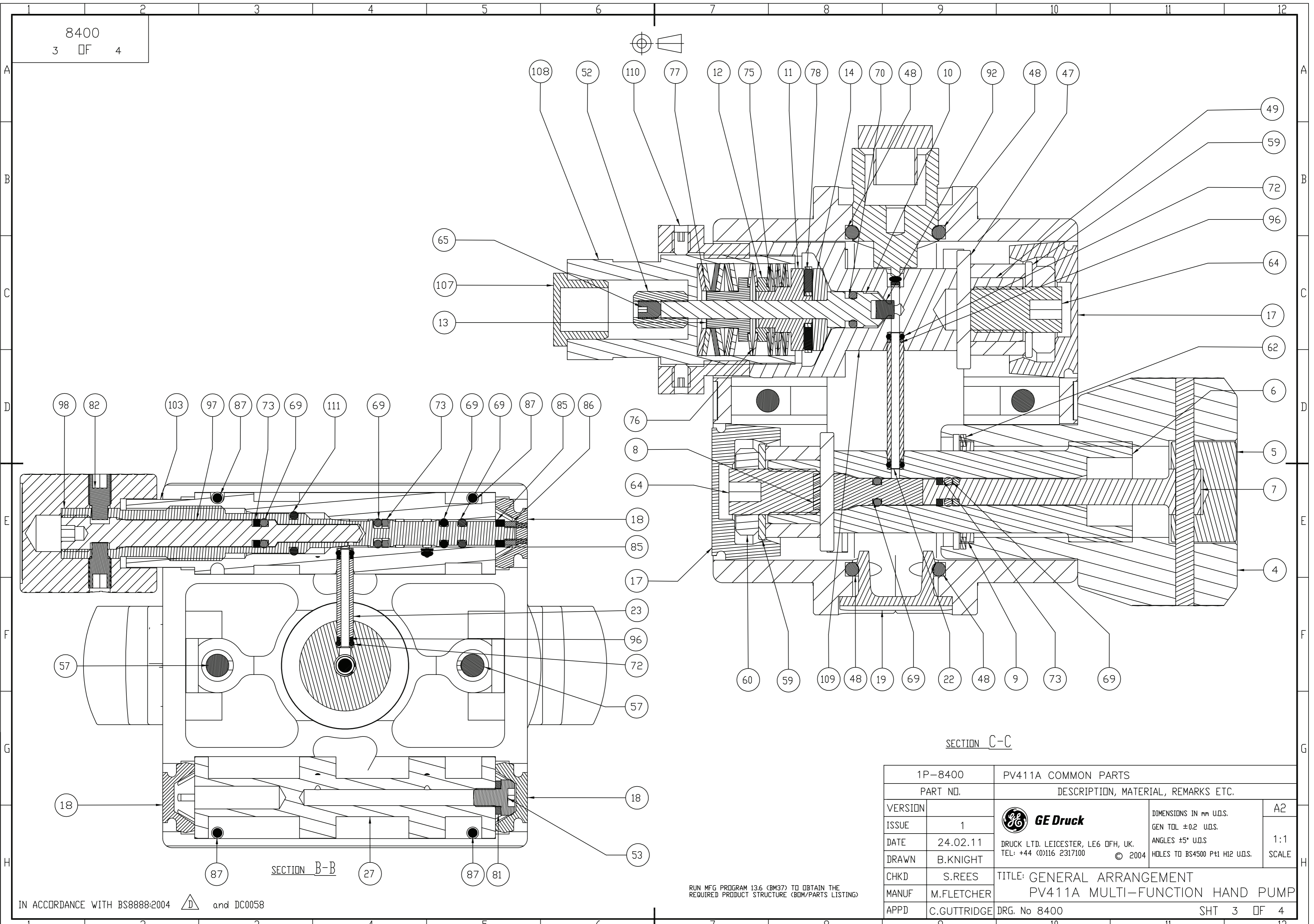
1P-8400		PV411A COMMON PARTS	
PART NO.		DESCRIPTION, MATERIAL, REMARKS ETC.	
VERSION			A2
ISSUE	1		DIMENSIONS IN mm U.O.S. GEN TOL ±0.2 U.O.S.
DATE	24.02.11	DRUCK LTD. LEICESTER, LE6 0FH, UK. TEL: +44 (0)116 2317100 © 2004	1:1
DRAWN	B.KNIGHT		ANGLES ±5° U.O.S. HOLES TO BS4500 Pt1 H12 U.O.S.
CHKD	S.REES	TITLE: GENERAL ARRANGEMENT	
MANUF	M.FLETCHER	PV411A MULTI-FUNCTION HAND PUMP	
APPD	C.GUTTRIDGE	DRG. No 8400	SHT 2 □F 4

IN ACCORDANCE WITH BS8888:2004 and DC0058

RUN MFG PROGRAM 13.6 (BM37) TO OBTAIN THE
REQUIRED PRODUCT STRUCTURE (BOM/PARTS LISTING)

AUTOCAD DRAWING

8400
3 □ F 4



SECTION C-C

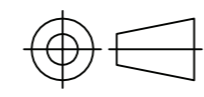
1P-8400		PV411A COMMON PARTS	
PART NO.		DESCRIPTION, MATERIAL, REMARKS ETC.	
VERSION	1	GE Druck DRUCK LTD. LEICESTER, LE6 0FH, UK. TEL: +44 (0)116 2317100 © 2004	A2
ISSUE	24.02.11		DIMENSIONS IN mm U.S. GEN TOL ±0.2 U.S. ANGLES ±5° U.S.
DATE	B.KNIGHT	HOLES TO BS4500 Pt1 H12 U.S.	SCALE
DRAWN	S.REES		
CHKD	M.FLETCHER	TITLE: GENERAL ARRANGEMENT	
MANUF	C.GUTTRIDGE	PV411A MULTI-FUNCTION HAND PUMP	
APPD	DRG. No 8400	SHT 3 □ F 4	

RUN MFG PROGRAM 13.6 (BM37) TO OBTAIN THE
REQUIRED PRODUCT STRUCTURE (BOM/PARTS LISTING)

IN ACCORDANCE WITH BS8888:2004 and DC0058

AUTOCAD DRAWING

8400
4 OF 4



40	1	8083	NUT END
39	1	8082	SPRING SEAT
38	1	8069	SPRING-PUMP
37	1	8067	PISTON SHAFT
36	1	8066	PRIMARY SEAL
35	1	8065	PRIMARY PISTON
34	1	8063	SCREW-ADJUSTING
33	1	8062	CASE-THROUGH
32	4	8061	LEVER
31	1	8060	CROSSHOLD
30	2	8059	SHELL
29	2	8058	HANDLE
28	2	8056	ADAPTOR
27	1	8055	LP MANIFOLD
26	1	8054	PRESSURE PORT
25	2	8053	CONNECTOR
24	2	8052	CONNECTOR
23	1	8051	CONNECTOR
22	1	8050	CONNECTOR
21	5	8049	FIR TREE
20	2	8048	PLUG,BLIND
*	19	8046	LOGO PLUG
18	3	8045	PLUG-15
17	2	8044	PLUG-30
16	2	8043	VALVE BOX TOP
15	1	8042	VALVE BOX BASE
14	1	8039	THRUST DISC
13	1	8038	DISC SPRING SUPPORT-3
12	1	8037	DISC SPRING SUPPORT-2
11	1	8036	DISC SPRING SUPPORT-1
10	1	8035	RV VALVE STEM
9	1	8032	COLLAR-CENTERING
8	1	8031	VOLUME PLUG
7	1	8030	VOLUME PISTON
6	1	8029	VOLUME CYLINDER
5	1	8028	PISTON CENTRE
4	1	8027	VOLUME KNOB
3	1	8003-SI	COMMON RELIEF VALVE LABEL
2	1	8001	LABEL-COMMON
1	1	8000	LABEL-SELECTOR VALVE
ITEM	QTY	DRAWING NUMBER	DESCRIPTION
BILL OF MATERIALS			

82	2	8154	SCREW M5 X 10
81	3	8152	SEAL, BONDED
80	1	8146	□ RING
79	2	8145	DOWEL PIN M3 X 20
78	1	8144	AXIAL NEEDLE ROLLER
77	6	8143	DISC SPRING-20X8.2X1
76	2	8142	DISC SPRING-20X10.2X0.5
75	6	8141	DISC SPRING-20X10.2X0.4
74	1	8140	RING-ANTI EXTRUSION
73	4	8138	RING-ANTI EXTRUSION
72	20	8137	□ RING
71	1	8136	□ RING
70	1	8135	□ RING
69	6	8134	□ RING
68	1	8133	□ RING
67	1	8129	□ RING
66	1	8128	□ RING
65	3	8126	SCREW M4 X 5 SET
64	2	8125	SCREW M10 X 20 SET
63	1	8123	SCREW M3 X 3 SET
62	1	8122	CIRCLIP
61	1	8120	CIRCLIP
60	2	8119	LOCK-NUT- M10
59	2	8117	WASHER-M10
58	2	8116	SCREW-M5 X 50 CAP
57	2	8115	SCREW-M5 X 20 CAP
56	4	8114	SCREW-M4 X 8 CAP
55	10	8113	SCREW-M3 X 12 CAP
54	4	8112	SCREW-M3 X 6 CAP
53	3	8111	SCREW-M4 X 6 PAN
52	3	8110	SPACER-M4 X12 THREDED HEX
51	5	8109	SPACER-M3 X12 THREDED HEX
50	2	8108	SPACER-M3 X10 THREDED HEX
49	4	8104	DOWEL PIN M2 X 10
48	10	8102	DOWEL PIN M3 X 12
47	4	8101	DOWEL PIN M3 X 24
46	1	8097	RESERVOIR PORT
45	1	8096	PRESSURE PORT
44	1	8089	CYLINDER TOP
43	1	8088	SPRING-NON RETURN VALVE
42	1	8085	CYLINDER-PUMP
41	1	8084	RING-LOCK

111	1	101801	□ RING
110	1	8284	LOCK NUT
109	1	8281	RV BODY
108	1	8278	RV SCREW
107	1	8277	PLUG
106	1	8276_B	TUBE,NYLON
105	1	8276_A	TUBE,NYLON
104	2	8276	TUBE,NYLON
103	1	8275	VENT CYLINDER
102	1	8274	NON RETURN VALVE
101	1	8273	CYLINDER BOTTOM
100	1	8271	CONE
99	1	8270	THROUGH PIPE
98	1	8269	VENT SPINDLE
97	1	8268	SPINDLE PLUG
96	14	8234	BACKUP-CONNECTOR
95	3	8188	PLUG
94	1	8187	DOWEL PIN M4 X 50
93	1	8186	VALVE KNOB
92	1	8183	RV SEAL
91	1	8182	HOLD RING
90	1	8163	□ RING
89	1	8162	□ RING
88	1	8161	DOWEL PIN M3 X 8
87	4	8160	SELF THREADING SCREW
86	1	8159	AERTIGHT NUT M3
85	2	8158	WASHER M3
84	2	8157	DOWEL PIN M1.5 X 6
83	1	8156	□ RING

* REFER TO SALES ORDER FOR OPTIONAL BLANKING PLUG

ITEM	TOP LEVEL PART No.	BLANKING PLATE PART No.
19	PV411A-SC	1P-8214
19	PV411A-SI	1P-8046-SI
19	PV411A-T	1P-8046-T
19	PV411A-Y	1P-8046-Y

1P-8400		PV411A COMMON PARTS	
PART NO.		DESCRIPTION, MATERIAL, REMARKS ETC.	
VERSION	1	 GE Druck DRUCK LTD. LEICESTER, LE6 0FH, UK. TEL: +44 (0)116 2317100 © 2004	DIMENSIONS IN mm U.O.S. GEN TOL ±0.2 U.O.S. ANGLES ±5° U.O.S. HOLES TO BS4500 Pt1 H12 U.O.S.
ISSUE	1		A2
DATE	24.02.11	TITLE: GENERAL ARRANGEMENT PV411A MULTI-FUNCTION HAND PUMP	1:1 SCALE
DRAWN	B.KNIGHT		
CHKD	S.REES	DRG. No 8400	SHT 4 OF 4
MANUF	M.FLETCHER		
APPD	C.GUTTRIDGE		

IN ACCORDANCE WITH BS8888:2004 and DC0058