

Standard Size Power Packs

INTRODUCTION -

BELL HYDRAMATICS products are being manufactured by M/s Bell Fluidtechnics Pvt Ltd. Mumbai, India. We are leading Hydraulic Company in India since 1992, having state of art manufacturing facilities at Navi Mumbai-India with highly skilled workforce and dedicated engineers to support all applications in hydraulics.

This catalogue is to introduce different versions of BELL MINI PACK units and possibilities of different combinations of power pack units to suit as per your applications.

HOW TO CHOOSE THE UNIT :

On the basis of your application and sequence of operation, considering Force, Speed of actuator following parameters are decided:

- Electric motor capacity,
- Pump capacity
- Tank capacity
- Mounting style.

Before making a firm order, please consult our application engineer for correct ordering code to suit your application.

INSTALLATION :

BELL MINI PACKS can be mounted in any position as shown in the catalogue, however, please avoid the mounting position that will affect the suction of the pump. We request you to consult our application engineer before ordering and installation. If the unit is required to be mounted on the vibrating structure, It is recommended to install anti-vibration mounts below the unit.

OIL TANK AND TEMPERATURE:

Tank should be sized properly for proper pump suction, better heat dissipation. The maximum oil temperature -60 deg. cen. Recommended oil viscosity: 15 cst up to 68 cst.

WIRING AND STARTING :

The wiring should be as per the electrical inputs indicated in the diagrams. Ensure proper direction of rotation of Electric motor/pump.

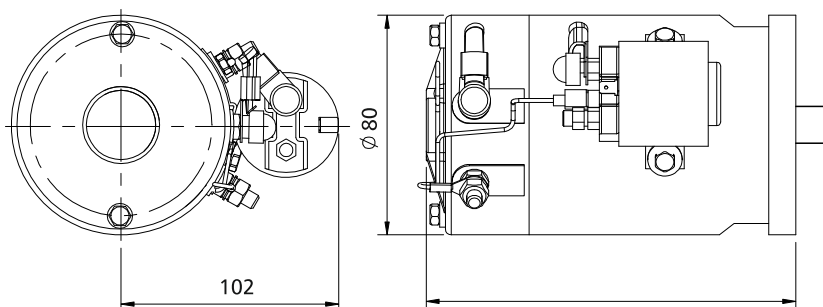
- Oil level and condition
- Direction of rotation of motor.
- Condition of pump, relief valve,
- Solenoid valve.

The oil should be replaced after the first 100 hours of duty and again after 3000 hours or once a year.

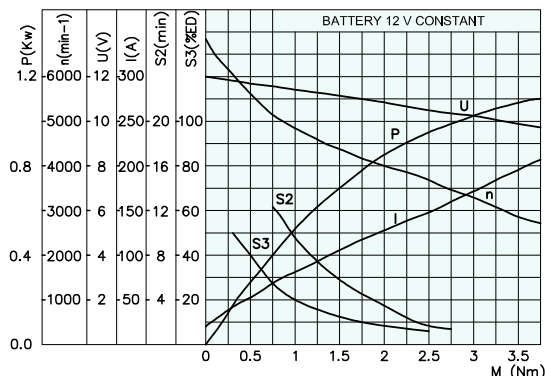
1 ■■■ / ■■

CODE	V (VOLT)	W (WATT)	S2(min) / S3(ED%)	IP
D108	12	800	4/9	44
D208	24	800	2.5/8	44
D116	12	1600	2/10	54
D22	24	2200	2/5	54

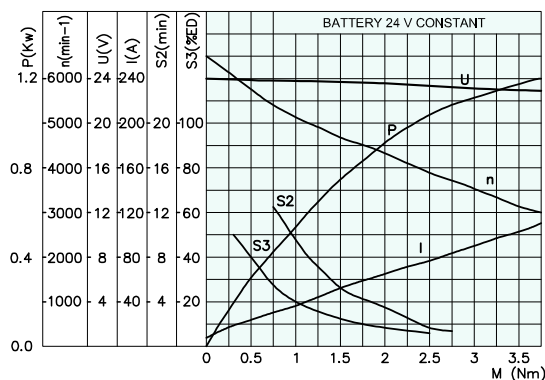
D 108, D 208



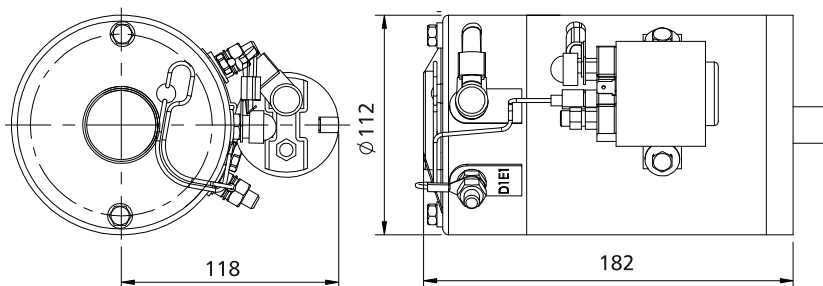
D 108 CHARACTERISTIC



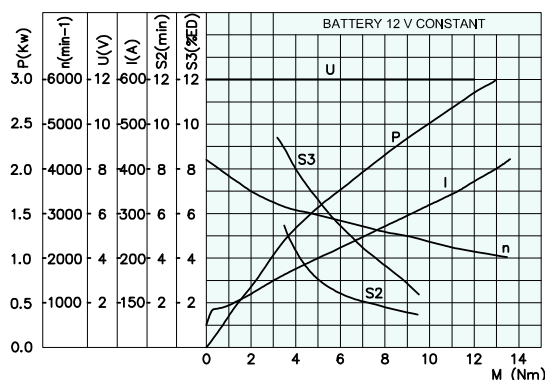
D 208 CHARACTERISTIC



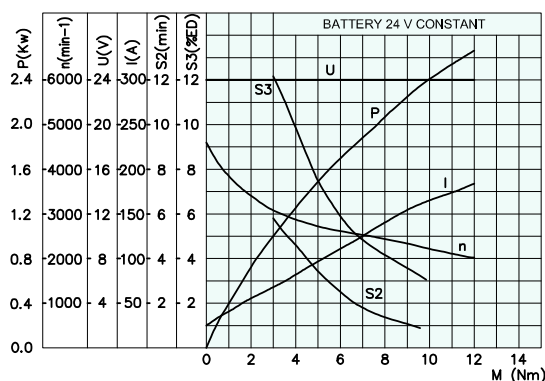
D 116, D 222



D 116 CHARACTERISTIC



D 222 CHARACTERISTIC

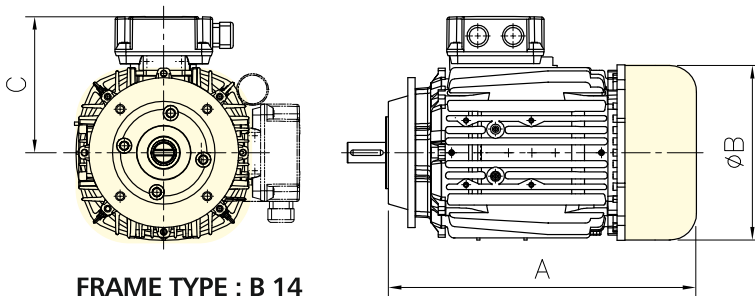


1

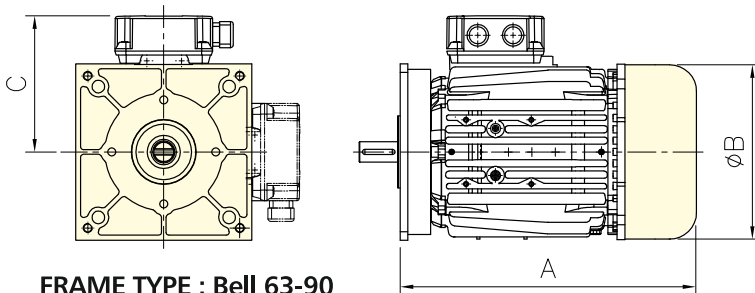
CODE		2POLES		4POLES		Dimension (mm.)			Frame	Junction Type
2POLE	4POLE	Kw	Hp	Kw	Hp	A	B	C		
A2018	A4012	0.18	1/4	0.12	1/6	200	124	98	63	Bell- 63
A2025	A4018	0.25	1/3	0.18	1/4					
A2037	A4025	0.37	1/2	0.25	1/3	230	137	107	71	Bell- 71
A2055	A4037	0.55	3/4	0.37	1/2					
A2075	A4055	0.75	1	0.55	3/4	235	156	122	80	Bell- 80/B14
A211	A475	1.1	1.5	0.75	1					
	A415			1.5	2	276	176	129	90	Bell-90/B14
	A418			1.8	2.5					
	A422			2.2	3					
	A422			2.2	3	306	195	140	100	B14
	A437			3.7	5	325	219	160	112	
	A440			4	5.3					

Electric Motor

CODE	0	A	B	D
TYPE	Without	AC Three	AC Single	Direct
	Motor	Phase Motor	Phase Motor	Current



FRAME TYPE : B 14

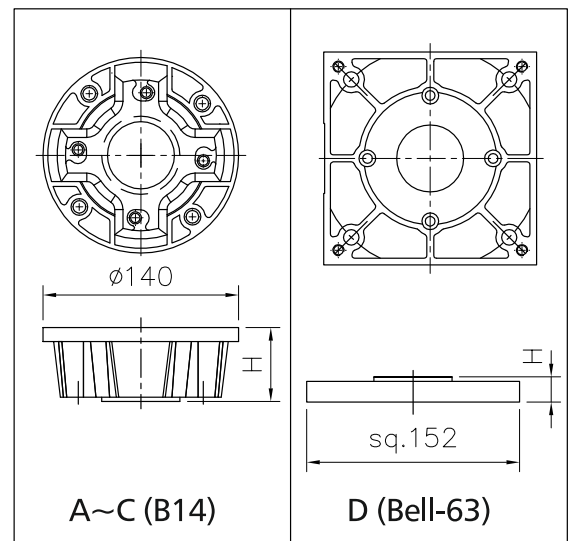


FRAME TYPE : Bell 63-90

2

Junction

CODE	Frame	Height (mm)	Frame Type
O	Without Junction		—
A	80	40	
B	90	50	B14
C	100/112	60	
D	80, 90	15	Bell-63

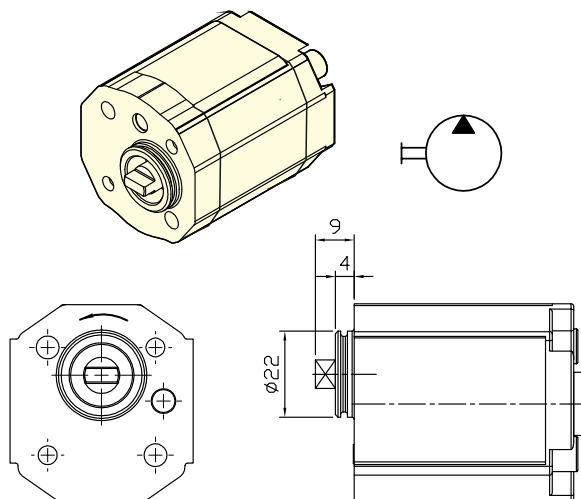


- * About: 2P x 60 Hz - 3400 RPM, 2P x 50 Hz - 2800 RPM, 4P x 60 Hz -1700 RPM, 4Px50Hz-1450RPM.
- * Insulation Class : "F" Class (Limit Temperature : 155°C)
- * Degrees of protection : IP54.

3

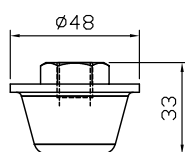
3

CODE	Capacity (cc/rev)	Liter/min (1,700 r.p.m.)	Max. working Pressure (bar)	Peak Pressure (bar)
025	0.25	0.425	210	250
035	0.35	0.595	210	250
045	0.45	0.765	210	250
060	0.60	1.020	210	250
075	0.75	1.275	210	250
080	0.80	1.360	210	250
100	1.00	1.700	210	250



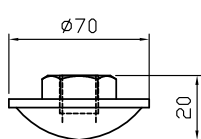
Suction Filter

A-Type



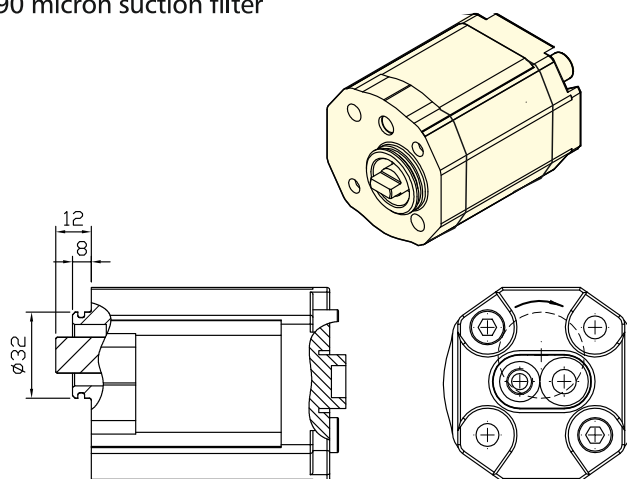
F48 - 14(BSP-G1/4)
F48 - 38(BSP-G3/8)

B-Type



F63 - 14(BSP-G1/4)
F63 - 38(BSP-G3/8)

Standard Gear Pump
*90 micron suction filter

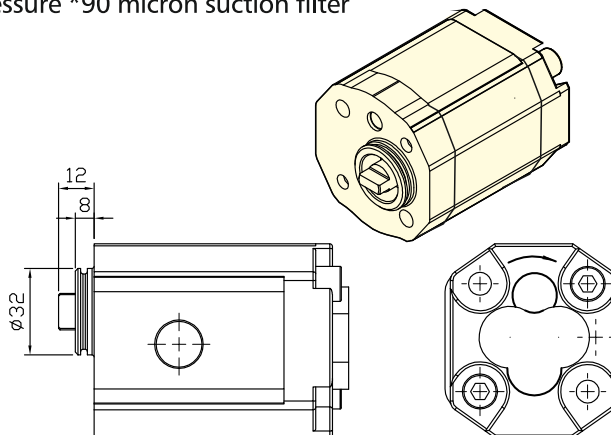


Gear pump left rotation

CODE	Capacity (cc/rev)	Liter/min (1,700r.p.m.)	Max. Working Pressure (bar)	Peak Pressure (bar)
11	1.1	1.87	210	250
16	1.6	2.72	210	250
21	2.1	3.57	210	250
26	2.6	4.42	210	250
32	3.2	5.44	210	250
37	3.7	6.29	210	250
42	4.2	7.14	190	230
48	4.8	8.16	180	220
55	5.5	9.35	160	200
62	6.2	10.54	140	180
78	7.8	13.26	120	160
88	8.8	14.96	100	140

Cast-iron Cover Gear Pump for high Pressure *90 micron suction filter

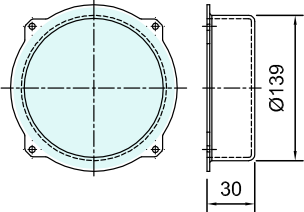
CODE	Capacity (cc/rev)	Liter/min (1,700r.p.m.)	Max. Working Pressure (bar)	Peak Pressure (bar)
11C	1.1	1.87	300	350
16C	1.6	2.72	300	350
21C	2.1	3.57	300	350
26C	2.6	4.42	300	350
32C	3.2	5.44	280	330
37C	3.7	6.29	250	300
42C	4.2	7.14	220	270
48C	4.8	8.16	180	250
55C	5.5	9.35	150	210
62C	6.2	10.54	140	180
78C	7.8	13.26	130	160
88C	8.8	14.96	120	150



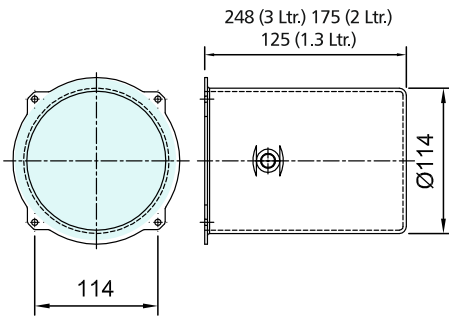
Gear pump left rotation

4

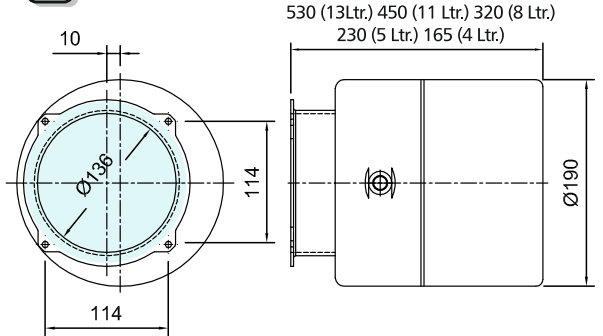
A Flange



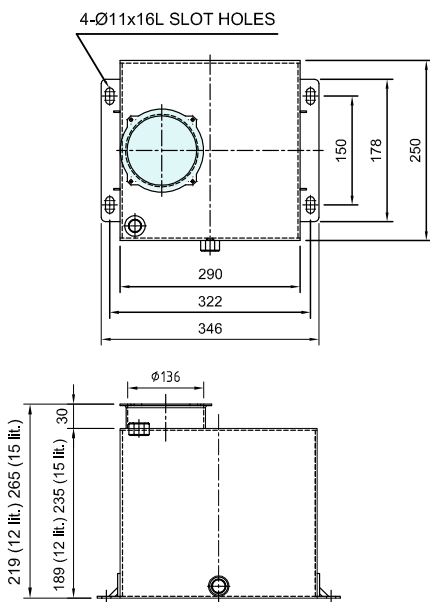
B 1.3 Litre, 2 Litre, 3 Litre



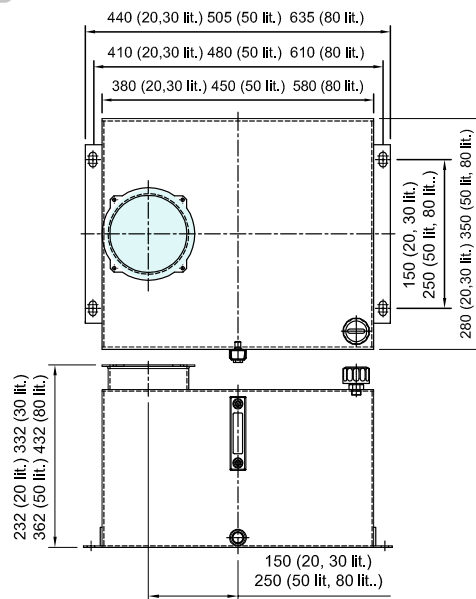
C 4 Litre, 5 Litre, 8 Litre, 11 Litre, 13 Litre,



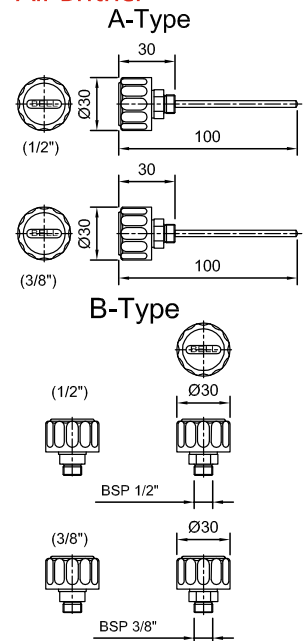
D 2 Litre, 1.5 Litre



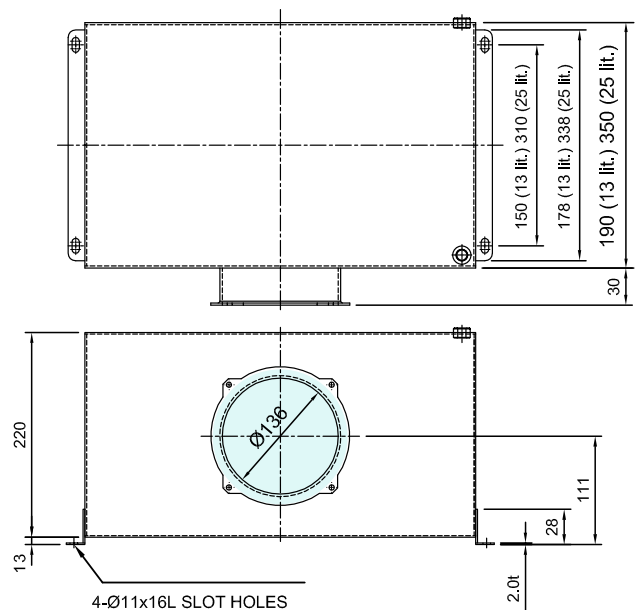
E 20 Litre, 30 Litre 50 Litre, 80 Litre



Air Brither



F 13 Litre, 25 Litre (Horizontal)



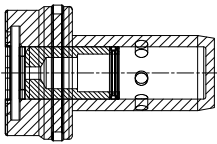
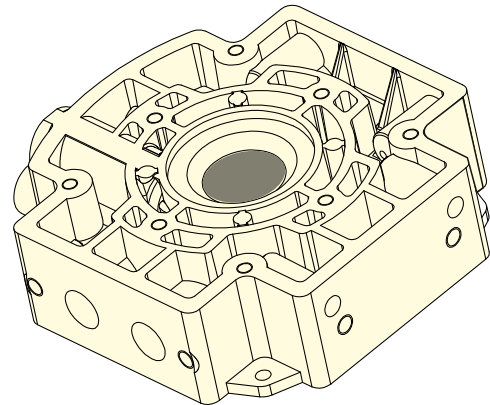
CODE	Tank Capacity (Liter)	Useable Capacity (Liter)		Drg. No.
		Horizontal	Vertical	
000	Without	-	-	-
00F	Flange	-	-	A
01C	1.3	0.8	-	B
02C	2	1.5	1.0	
03C	3	2.5	1.8	
04C	4	3.0	2.5	C
05C	5	4.0	3.5	
08C	8	6.8	6.5	
11C	11	9.8	9.5	F
13C	13	11.8	11.5	
13SH	13	11	-	
12S	12	-	9.5	D
15C	15	-	12.5	F
25SH	25	21	-	E
20S	20	-	14.0	
30S	30	-	24.0	
50S	50	-	38.0	
80S	80	-	57.0	

Tank

5

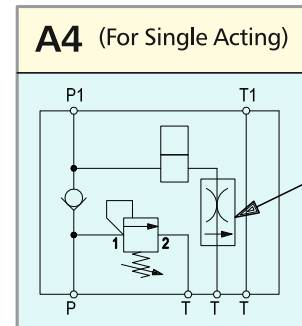
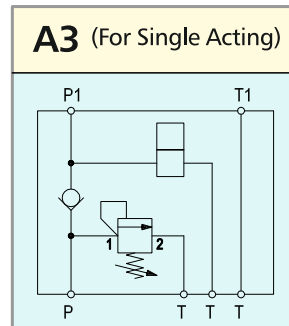
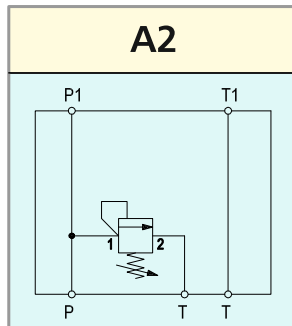
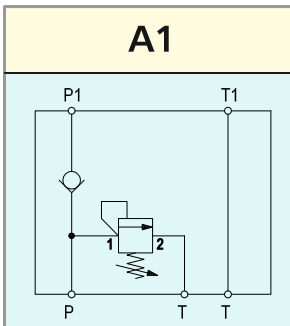
Setting compensated throttle for manifold diagram A4

CODE	A	B	C	D	E
Regulated flow-rate lit/min	3	4	6	8	10

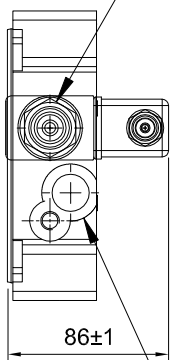
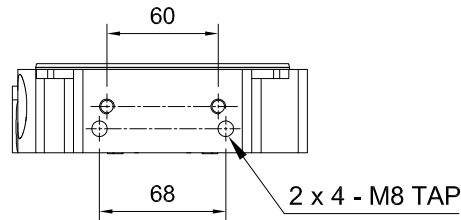


Only for manifold diagram A4

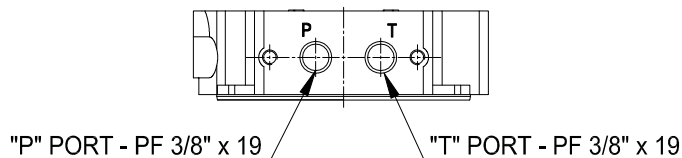
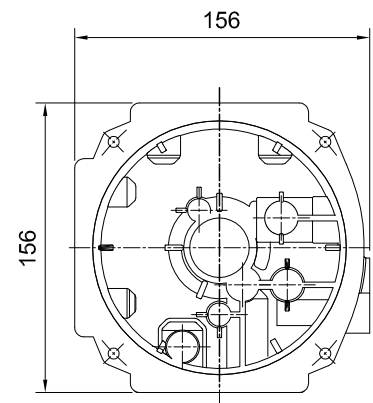
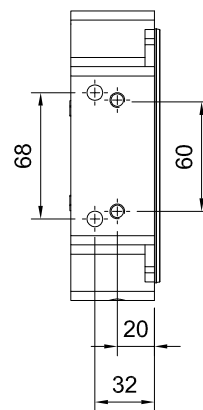
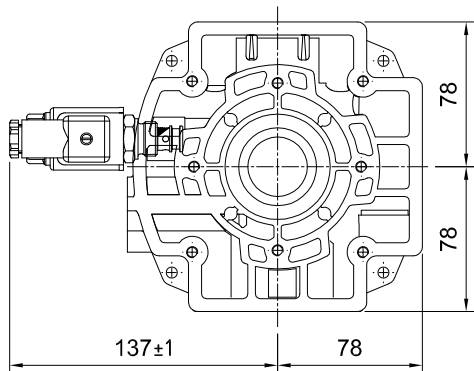
Setting Compensated Throttle



Cartridge Valve for Single Acting



Relief Valve



All dimensions in mm

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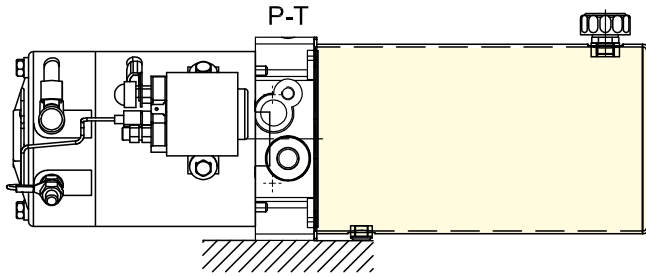
CODE	Description	Diagram	Drawing
EX	Plug for Double Acting		
EA	Electric valve : Nor. Open		<p>Solenoid ED 100% ID 65 (IEC 144 - DIN 40050) The EA version functions only with DC Solenoid and AC application use RAC Solenoid.</p>
	Max. working pressure		
	Flow max.	25 lit/min	
EE	Electric valve : Nor. Close with Emergency		<p>Solenoid ED 100% ID 65 (IEC 144 - DIN 40050)</p>
	Max. working pressure		
	Flow max.	25 lit/min	
DE	Electric valve : Double Check Nor. Close with Emergency		<p>Solenoid ED 100% ID 65 (IEC 144 - DIN 40050) The EA version functions only with DC Solenoid and AC application use RAC Solenoid. Sch.24 36(21W)</p>
	Max. working pressure		
	Flow max.	20 lit/min	
MC	Two—Way manual operated cartridge Valve with Micro Switch		<p>Micro Switch for Motor Driving</p>
	Max working pressure		
	Flow max.	25 lit/min	

	CODE	Solenoid	CODE	Solenoid	CODE	Solenoid	CODE	Solenoid
Electric control	0	Without	C	12V (DC)	N	220V 50 Hz (AC)	S	220V 60 Hz (AC)
	B	12V (DC)	M	110V 50 Hz (AC)	R	110V 60 Hz (AC)	Z	220V RAC

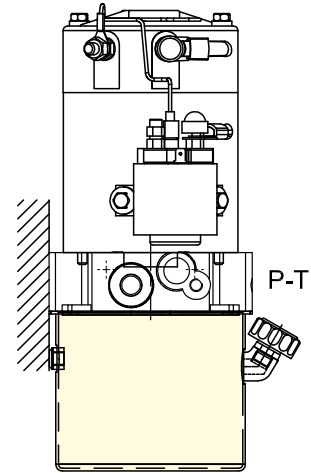
Cartridge Valve A3, A4

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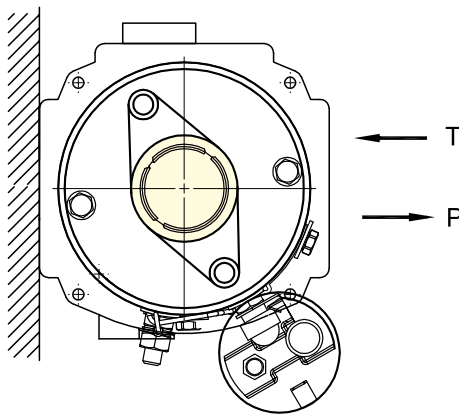
P



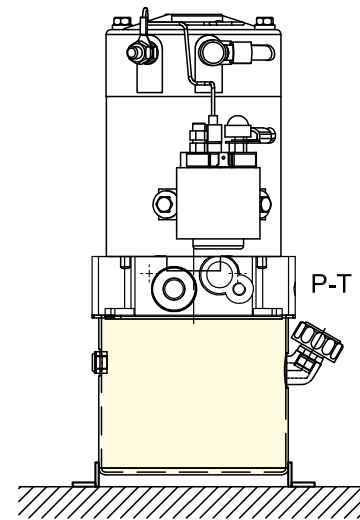
V



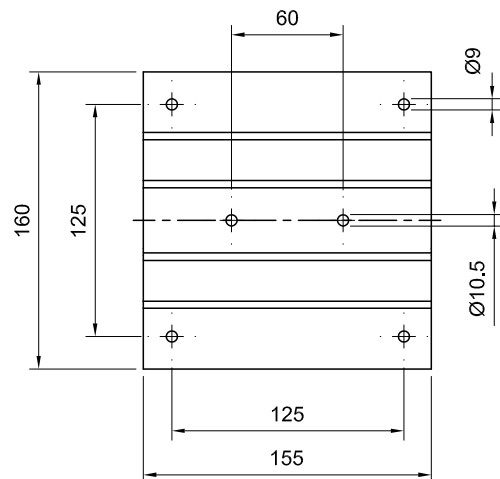
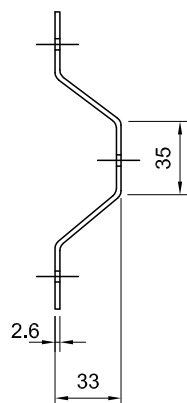
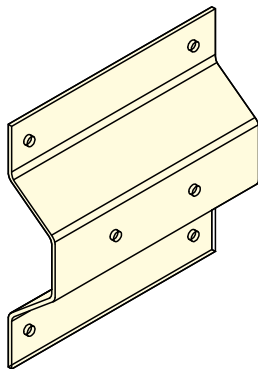
C



H



Without	G0
With	G1



8 ■■■ / ■

CODE	Description	Diagram	Diagram	Drawing
S13	Spacing element H = 13mm.			
N03	Element for solenoid valve CETOP 2143 parallel connection			
N05	Element for solenoid valve CETOP 2143 parallel connection			
V115	Element for double locking direct solenoid valve with emergency			
V215	Element for double locking direct solenoid valve with emergency			
V117	Throttle Element for single acting direct solenoid valve			
V135	4 post Car Lift Element for double locking direct solenoid valve with emergency			
V235	4 post Car Lift Element for double locking direct solenoid valve with emergency			

	CODE	Solenoid	CODE	Solenoid	CODE	Solenoid	CODE	Solenoid
Electric controls	O	Without	C	12V (DC)	N	220V 50 Hz (AC)	S	220V 60 Hz (AC)
	B	12V (DC)	M	110V 50Hz (AC)	R	110V 60Hz (AC)	Z	220V RAC

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Double Acting Valve

Solenoid valves CETOP 2143

CODE	Diagram	CODE	Diagram	CODE	Diagram	Drawing
1801		1803L		1808		
1801L		1806		1817		
1803		1807		-	-	

CODE	Description	Diagram	Drawing	
V21	Element for Nor. close Solenoid Valve with Emergency			
	Max working pressure			350 bar
	Flow max.			25 lit/min
V22	Element for Double close Solenoid Valve with Emergency			
	Max working pressure			250 bar
	Flow max.			20 lit/min
V23	Element for Nor. close Solenoid Valve			
	Max working pressure			250 bar
	Flow max.			20 lit/min
F14 F38 F12	Hose Rupture Valve (Fuse Valve)		<p>F14-45 F38-60 F12-64</p> <p>F14 : Hexagon 19 F14 : Hexagon 22 F14 : Hexagon 27</p>	
	Max working pressure			300 bar
	Flow max.			F14 : 15 lit/min F38 : 40 lit/min F12 : 80 lit/min
LIFT VALVE	Port Size	R 3/8 "		
	Max pressure	210 bar		
	Max. Flow	30 lit/min		
	Weight	1.7 kg.		
N22	Single acting hand operated pump			
	Max working pressure			250 bar
	Flow capacity			6.5 cc
V101	Element for Pilot Operated Double Check Valve on A and B			
V101	Element for Modular Check throttle Valve on A and B			

	CODE	Solenoid	CODE	Solenoid	CODE	Solenoid	CODE	Solenoid
Electric controls	O	Without	C	12V (DC)	N	220V 50 Hz (AC)	S	220V 60 Hz (AC)
	B	12V (DC)	M	110V 50Hz (AC)	R	110V 60Hz (AC)	Z	220V RAC

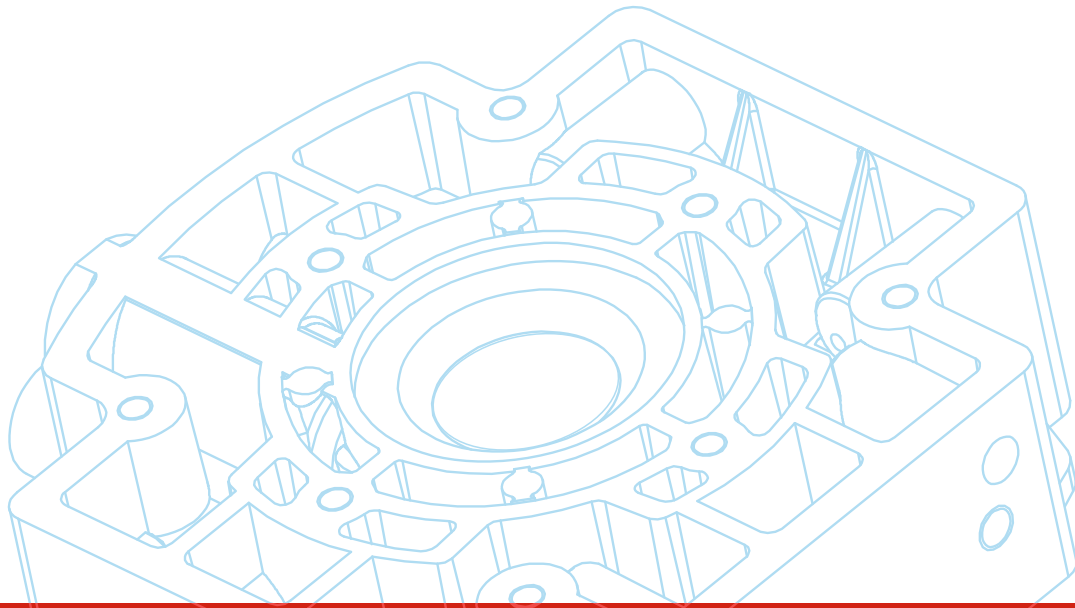


TABLE LIFTER



HYDRAULIC CORNER SHEARING M/C



X TYPE/ LOW HEIGHT



ALIGNMENT SCISSORS TYPE



UNICOIL LEVELER



COMPRESSOR



NC LEVELER FEEDER M/C



GATE TYPE



ELECTRICAL PALLET



UNICOILR



BUTT-WELDING JIG MACHINE



AERIAL WORKING PLATFORM



DOCK LEVELER



4 POST TYPE



WING BODY



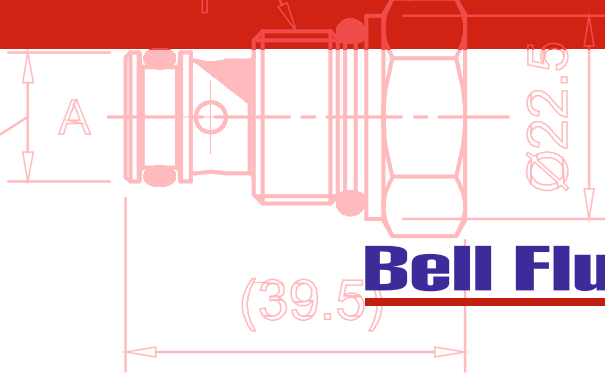
COIL CAR



ELECT. STACKER



Ø15.86



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