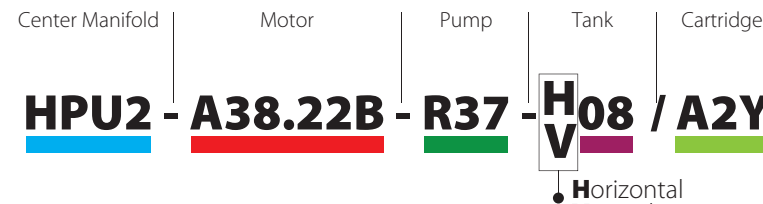


HOW TO ORDER



If there will be no additional cartridge at the power unit, please leave the part after the "I" sign blank.

CENTER MANIFOLD



Code	Description
HPU2	Standart center manifold

EXTERNAL MANIFOLDS

Code	Description
HPM10	Spacer manifold
HPM11A	NG6 parallel vertical manifold lateral ports
HPM11S	NG6 parallel vertical end manifold lateral ports
HPM12A	NG6 serial vertical manifold lateral ports
HPM12S	NG6 serial vertical end manifold lateral ports
HPM11HB	NG6 parallel horizontal starting manifold lateral ports
HPM11HA	NG6 parallel horizontal middle manifold lateral ports
HPM11HS	NG6 parallel horizontal end manifold lateral ports
HPM12HB	NG6 serial horizontal starting manifold lateral ports
HPM12HA	NG6 serial horizontal middle manifold lateral ports
HPM12HS	NG6 serial horizontal end manifold lateral ports
HPM20	Double single acting manifold
HPM25	Hand pump application manifold
HPM82	SAE8-2 cavity manifold
HPM83	SAE8-3 cavity manifold

Please order external manifolds separately from the power units.

SPARE PARTS

Code	Description
F82	Foot flange
KPLNAC	Coupling for AC motor
KPLNDC	Coupling for DC motor
DK0312A	12VDC-150A Relay starter
DK0324M	24VDC-150A Relay Starter
DK0324M	24VDC-200A Relay Starter
OC02	Oil cap 1/4"
OC03	Oil cap 3/8"
OC04	Oil cap 1/2"
OC06	Oil cap 3/4"
FI05	Suction filter 3/8"
TDAH	Horizontal suction pipe 3/8"
TDA***	Vertical suction pipe 3/8"
TDR***	Return line pipe

*** Please write the oil tank code number. Example: For Q180mm, 8lt tank, please write TDAC08, TDR08

Please contact with us for not included products and options in this brochure. All information is subject to change without notice

ELECTRIC MOTORS

12V DC Motors

Code	Power KW	Speed - rpm	Duty
D12.05	0.5	2400	S2=2 min
D12.08	0.8	3400	S2=2.5 min
D12.16	1.6	2300	S2=2.5 min
D12.20	2.0	2800	S2=7.5 min
D12.25	2.5	2300	S2=5 min

24V DC Motors

Code	Power KW	Speed - rpm	Duty
D24.05	0.5	2500	S2=2 min
D24.08	0.8	3400	S2=2.5 min
D24.13	1.3	4500	S2=6.5 min
D24.22	2.2	2600	S2=2 min
D24.30	3.0	2600	S2=5 min
D24.24	3.3	3000	S2=5 min
D24.25	4.5	2700	S2=5 min

220V AC Motors - 1 Phase

Code	Power KW	Speed - rpm	Duty
A22.07B	0.75	1420	S2=30 min
A22.15B	1.5	1420	S2=30 min
A22.15C	1.5	2850	S2=30 min
A22.22B	2.2	1420	S2=30 min
A22.22C	2.2	2850	S2=30 min
A22.30C	3.0	2850	S2=30 min

220/380V AC Motors - 3 Phase

Code	Power KW	Speed - rpm	Duty
A38.07B	0.75	1420	S2=30 min
A38.11B	1.1	1420	S2=30 min
A38.11C	1.1	2850	S2=30 min
A38.15B	1.5	1420	S2=30 min
A38.15C	1.5	2850	S2=30 min
A38.22B	2.2	1420	S2=30 min
A38.22C	2.2	2850	S2=30 min
A38.30C	3.0	2850	S2=30 min
A38.40C	4.0	2850	S2=30 min

B14 Flanged 220V AC Motors - S1

Code	Power KW	Speed - rpm	Frame
B22.02B	0.25	1420	71
B22.03B	0.37	1420	71
B22.05B	0.55	1420	80
B22.07B	0.75	1420	80
B22.11B	1.1	1420	90
B22.11C	1.1	2850	80/90
B22.15B	1.5	1420	90
B22.15C	1.5	2850	90
B22.22B	2.2	1420	100
B22.22C	2.2	2850	90
B22.30B	3.0	1420	100
B22.30C	3.0	2850	100

B22 type electric motors are used with B14 montage kit.

B14 Flanged 380V AC Motors - S1/IE3

Code	Power KW	Speed - rpm	Frame
B38.02B	0.25	1420	71
B38.03B	0.37	1420	71
B38.05B	0.55	1420	71/80
B38.07B	0.75	1420	80
B38.11B	1.1	1420	90
B38.11C	1.1	2850	80
B38.15B	1.5	1420	90
B38.15C	1.5	2850	80
B38.22B	2.2	1420	90/100
B38.22C	2.2	2850	90
B38.30B	3.0	1420	100
B38.30C	3.0	2850	90/100
B38.40C	4.0	2850	100

B38 type electric motors are used with B14 montage kit.

B14 Montage Kit

Code	Description
B14071	B14 Montage kit for 71 frame
B14080	B14 Montage kit for 80 frame
B14090	B14 Montage kit for 90 frame
B14100	B14 Montage kit for 100 frame

*** Please write the oil tank code number. Example: For Q180mm, 8lt tank, please write TDAC08, TDR08

Please contact with us for not included products and options in this brochure. All information is subject to change without notice

GEAR PUMPS

Standart Pumps - Group 1 CCW

Code	Diplacment cc/rev	Max. Speed rpm	Pressure - Bar Operating	Maximum
R05	0.5	6000	230	270
R06	0.65	6000	230	270
R08	0.8	6000	230	270
R11	1.1	6000	230	270
R13	1.3	6000	230	270
R16	1.6	6000	230	270
R18	1.8	6000	230	270
R21	2.1	6000	230	270
R27	2.7	6000	230	270
R32	3.2	5000	210	250
R37	3.7	4500	210	250
R42	4.2	4000	210	250
R48	4.8	3500	190	210
R58	5.8	3000	190	210
R70	7.0	2500	160	180
R80	8.0	2000	160	180

High Pressure Pumps - Group 1 CCW / Cast Iron Cover

Code	Diplacment cc/rev	Max. Speed rpm	Pressure - Bar Operating	Maximum
RC05	0.5	6000	250	300
RC06	0.65	6000	250	300
RC07	0.75	6000	250	300
RC10	1.0	6000	250	300
RC13	1.3	6000	250	300
RC16	1.6	6000	250	300
RC20	2.0	6000	250	300
RC25	2.5	6000	250	300
RC33	3.3	5000	250	300
RC37	3.7	4500	230	280
RC42	4.2	4000	230	280
RC48	4.8	3500	230	280

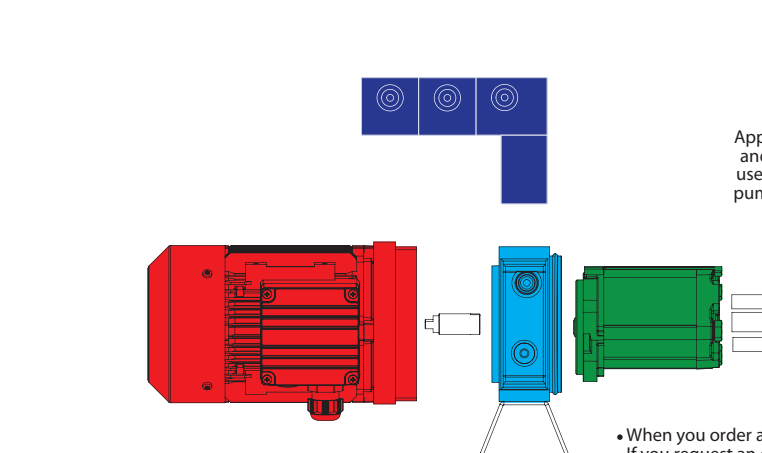
Low Noise Pumps - Group 1 CCW / Helical Gear

Code	Diplacment cc/rev	Max. Speed rpm	Pressure - Bar Operating	Maximum
RL05	0.5	6000	200	250
RL06	0.65	6000	200	250
RL07	0.75	6000	200	250
RL10	1.0	6000	200	250
RL13	1.3	6000	200	250
RL16	1.6	6000	200	250
RL20	2.0	6000	200	250
RL25	2.5	6000	200	250
RL33	3.3	5000	200	250
RL37	3.7	4500	200	250
RL42	4.2	4000	200	250
RL48	4.8	3500	200	250

Electropumps - Group 2 CCW

Code	Diplacment cc/rev	Max. Speed rpm	Pressure - Bar Operating	Maximum
RG04	4	4000	250	300
RG06	6	4000	250	300
RG08	8	3500	250	300
RG10	10	3500	250	300

RG type pumps are used only for electro pump application.



• When you order a complete power unit, the F82 foot flange will be attached to the unit as standart. If you request an other mounting type, please contact with us.

OIL TANKS

Steel Tank Q150 mm

Code	Capacity Lt	Length mm
B01	1.7	152
B02	2.8	215
B04	4	270

Steel Tank Q180 mm

Code	Capacity Lt	Length mm
C04	4	225
C05	5	270
C06	6	290
C08	8	370
C10	10	440
C12	12	545
C14	14	610

Steel Tank Q200 mm

Code	Capacity Lt	Length mm
O5	4	225
O6	5	270
O8	6	290
10	8	370
12	10	440
14	12	545

Steel Tank Q240 mm

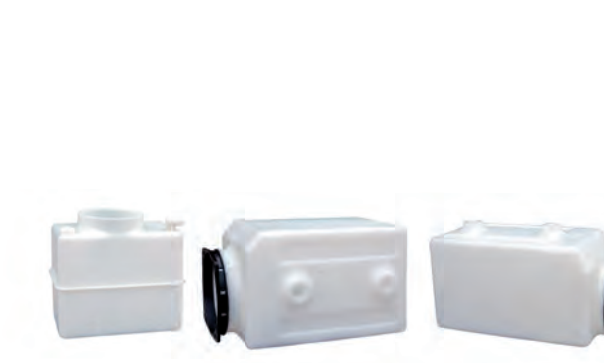
Code	Capacity Lt	Length mm
D18	18	430
D20	22	500
D22	25	610

Square Tank

Code	Capacity Lt	Length mm
S15	15	300x260x260
S20	20	350x300x300
S30	30	350x300x425

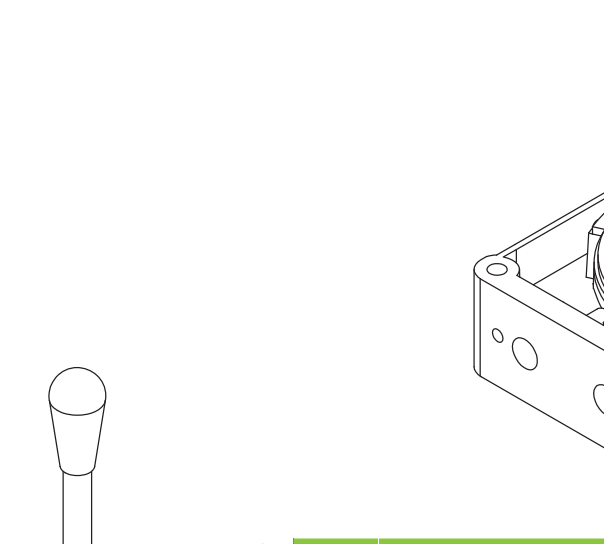
Tank Neck

Code	Diameter mm
N120	120
N123	123

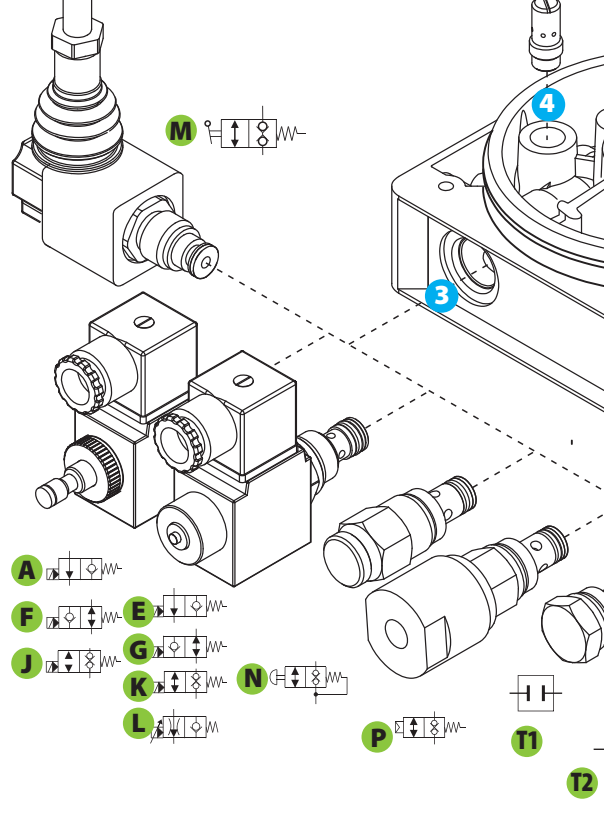


Please contact with us for plastic oil tank request

CARTRIDGES



Code	Description
Y	Flow control valve
X	Pressure compensated flow control valve
Z	Adjustable pres. Comp. Flow control valve

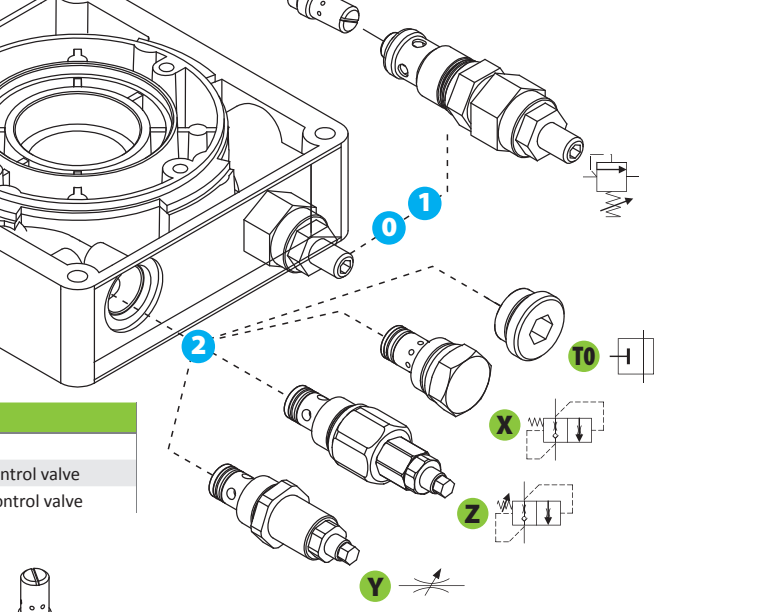


Code	Description	Voltage
A	2/2 NC solenoid valve with emergency	1-2-3-4-5-6 Please chose coil voltage from the adjacent coil table
E	2/2 NC solenoid valve	
F	2/2 NO solenoid valve with emergency	
G	2/2 NO solenoid valve	
J	2/2 NC double check solenoid valve with emerg.	
K	2/2 NC double check solenoid valve	8-9 Please chose coil voltage from the adjacent coil table
L	2/2 NC propotional solenoid valve	
M	2/2 NC manual operated valve	-
N	2/2 NC emergency button valve	-
P	2/2 NC pneumatic operated valve	-

Code Description

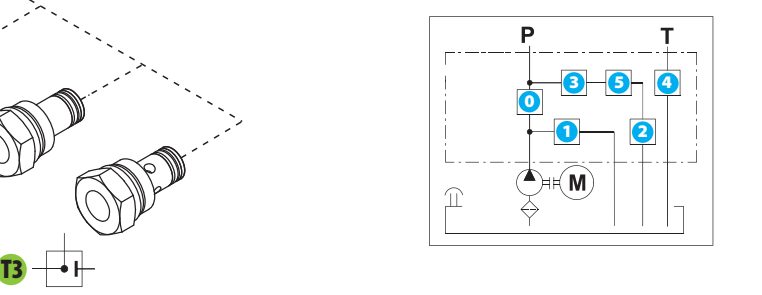
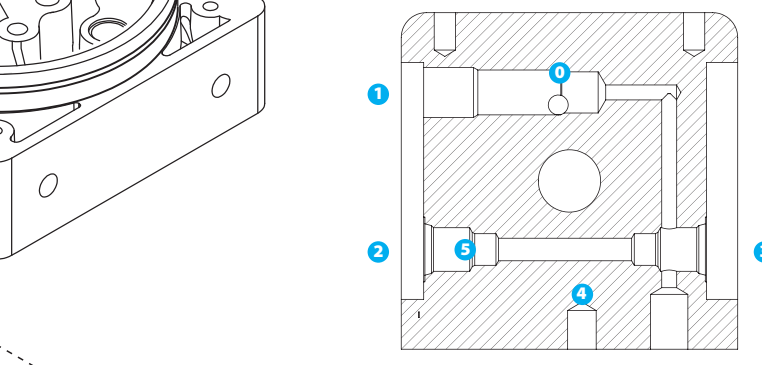
Code	Description
CV	Check valve
RV	Relief Valve

Relief and check valves are standart and mounted to the center manifold.



Code	Description
VCC14**	Pressure compensated flow control valve
VH14	VCC valve assembly body

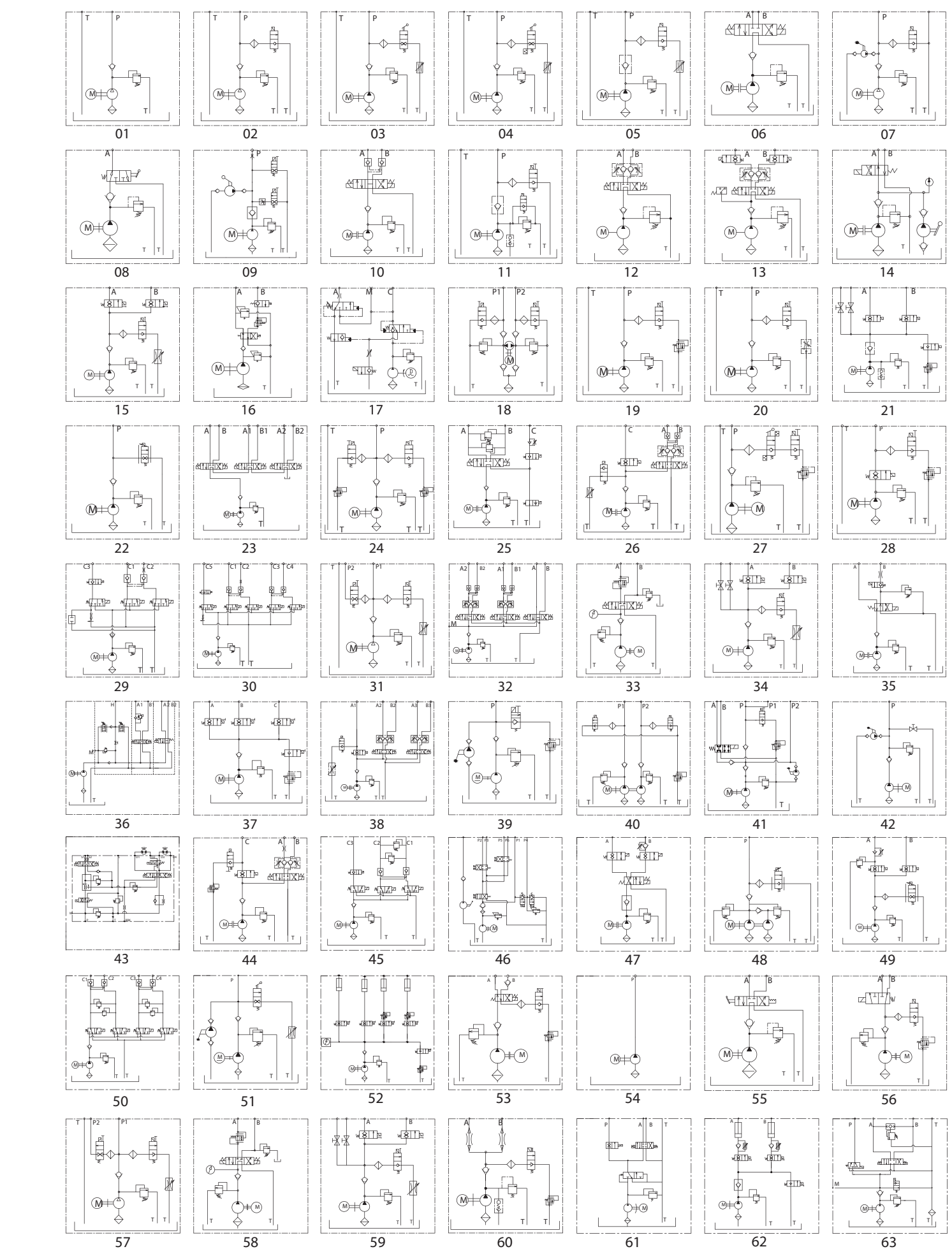
** Please write the flow rate which you want to control from 1 to 15 Lt/min



Code	Description
1	12VDC Coil
2	24VDC Coil
3	24VAC Coil
4	110VAC Coil
5	220VAC Coil
6	220VRAC Coil
8	12VDC Propotional Coil
9	24VDC Propotional Coil

DIN type LED connector will be attached to the coil as standart. Please contact with us for other connector type.

HYDRAULIC SCHEMAS





Popular Application Examples

- Electric stacker
- Electric forklift
- AGV
- Aerial work platform
- Scissor aerial platform
- Car lift
- Tyre changer
- Wheelchair lift
- Trailer
- Dump Trailer
- Dock leveller
- Medical bed
- Tail lift
- Snow plow
- Emergency steering



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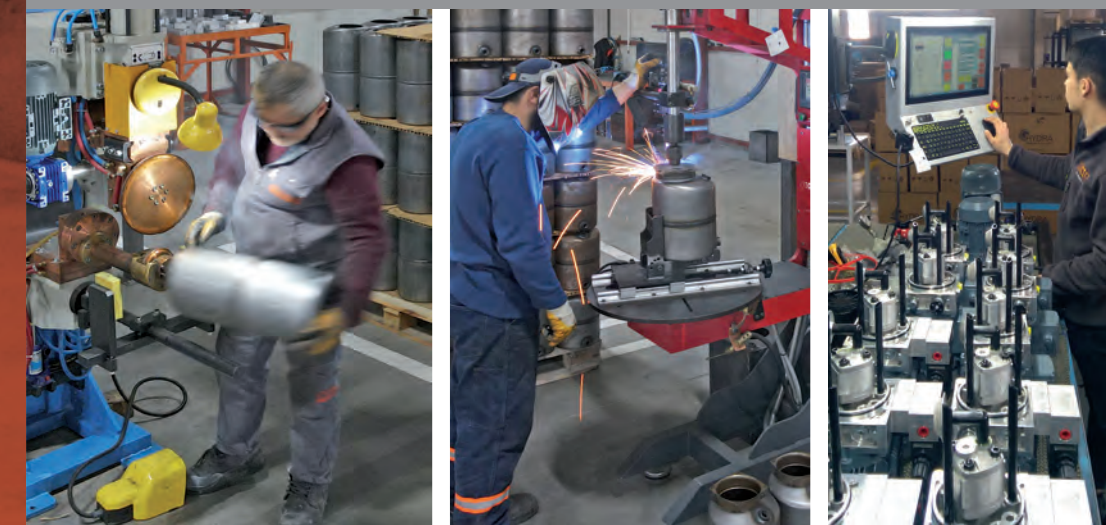
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Otto group has focused especially on the production of hydraulic components. We have providing competitive solutions for hydraulic power packs, hydraulic valve manifolds and hydraulic oil coolers for many years. In addition to standard products, we will be a strong and sustainable partner with customized solutions to your applications.

