

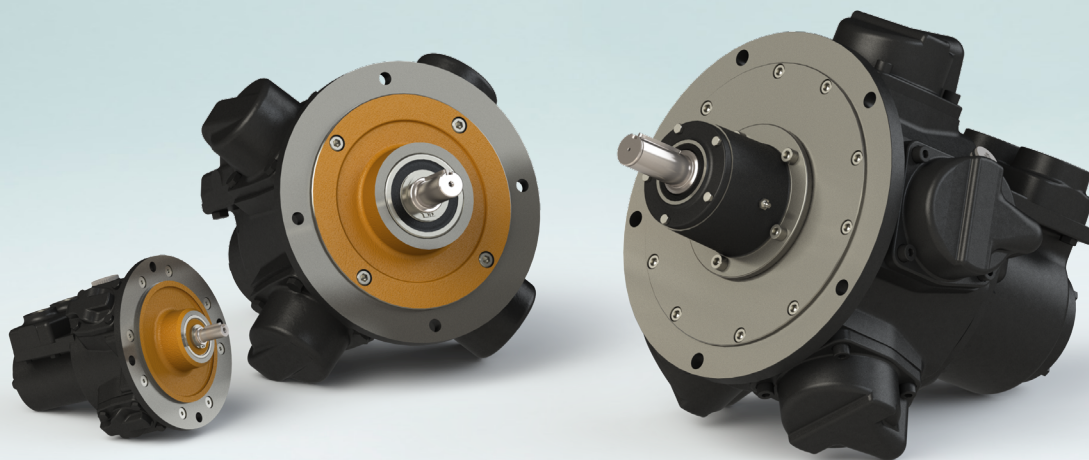


GLOBE AIRMOTORS B.V.

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Specifications: RM410

Piston Air Motor



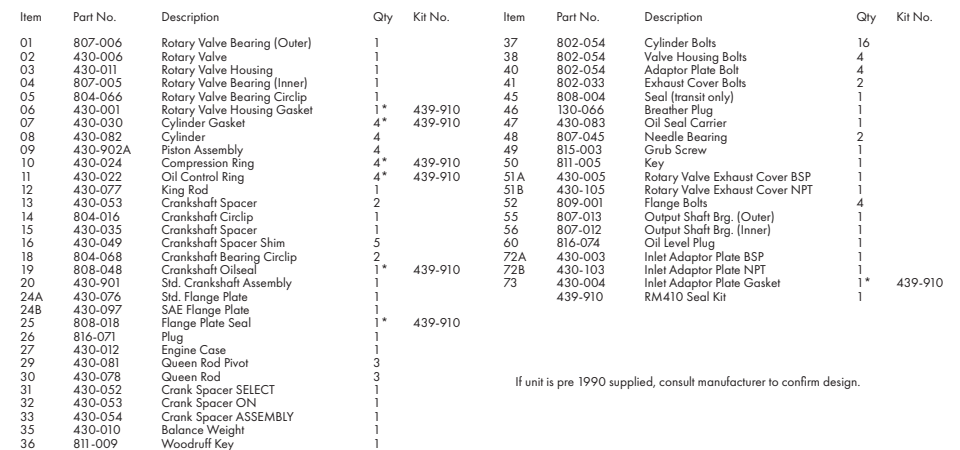
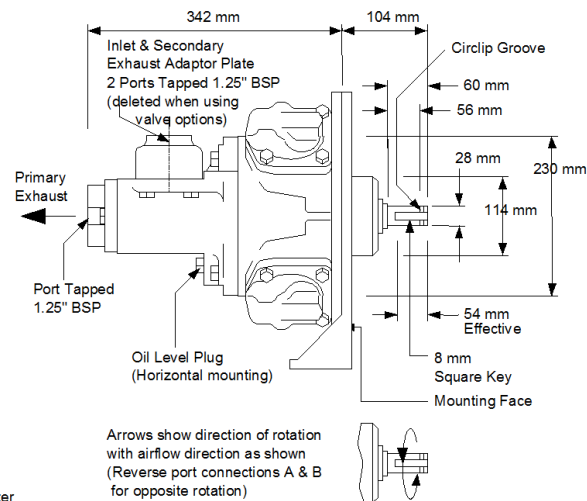
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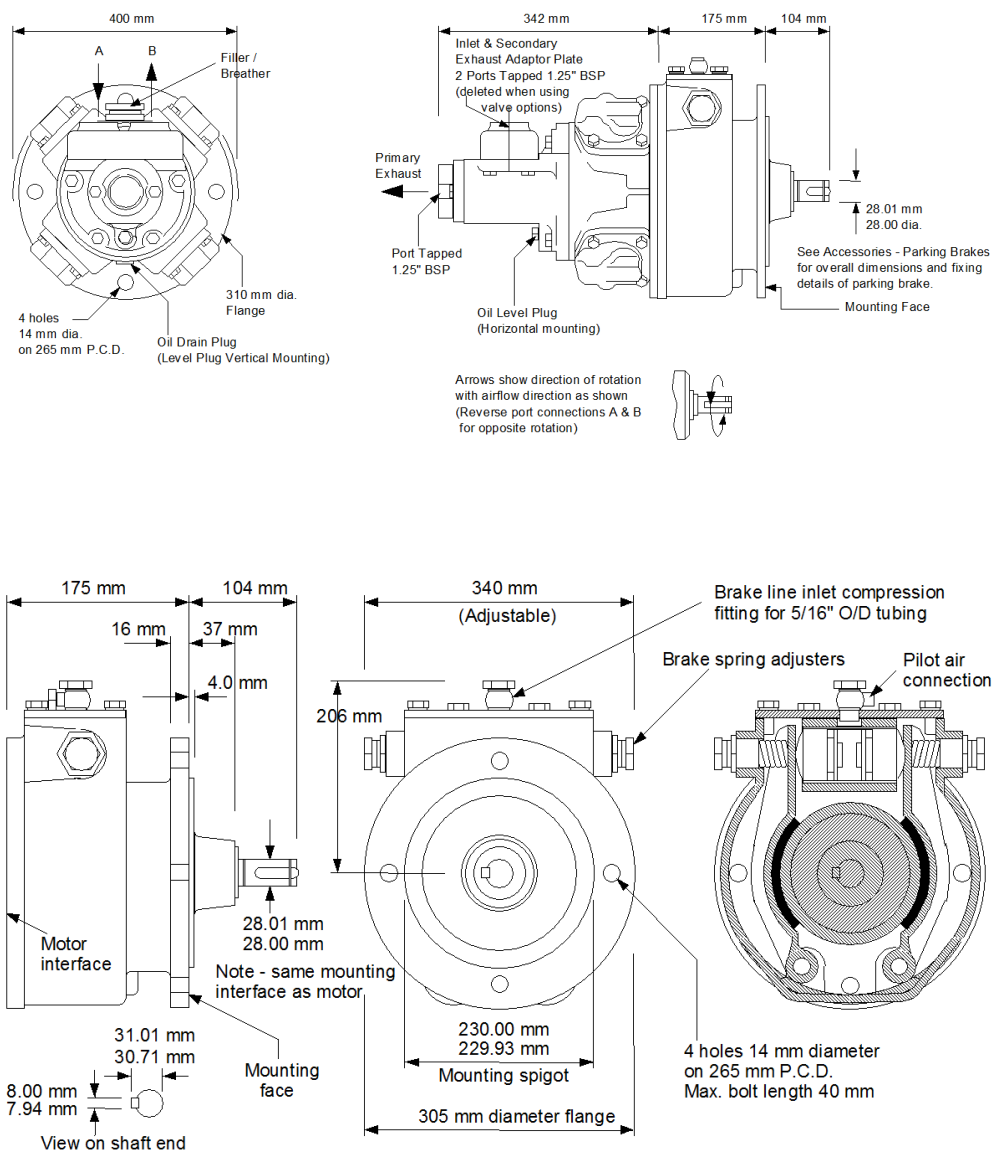
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Spare Parts List RM410



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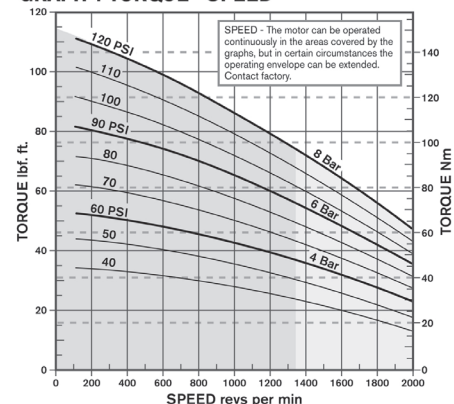
Dimensions & Performance RM410 + Brake



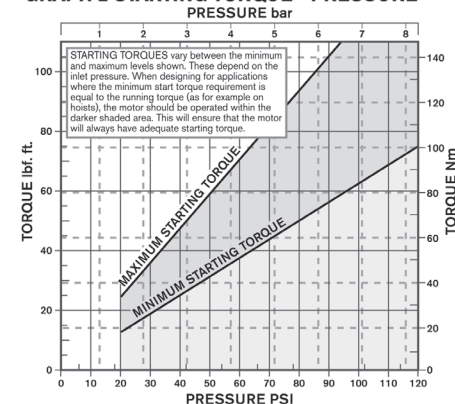
Gearbox ratio: None

Maximum speed: 2000 RPM
No Control Valve fitted

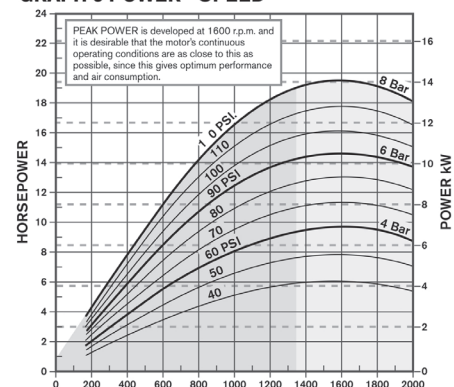
GRAPH 1 TORQUE - SPEED



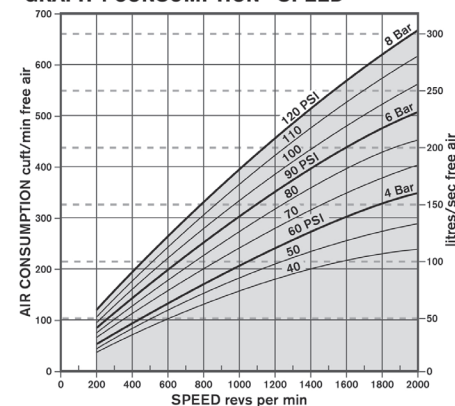
GRAPH 2 STARTING TORQUE - PRESSURE



GRAPH 3 POWER - SPEED



GRAPH 4 CONSUMPTION - SPEED



LUBRICATING OIL CAPACITIES

Horizontal 500ml Vertical 940ml

Use a good quality hydraulic oil with a viscosity of around 100cSt (460SSU) at 40°C (104°F)

AIRLINE FILTRATION AND LUBRICATION

Use 64 micron filtration or better. Choose a lubricator suitable for the flow required. Prior to initial start-up, inject oil into the inlet port.

GENERAL DATA

MASS (motor only) 62 kgs (137 lbs)

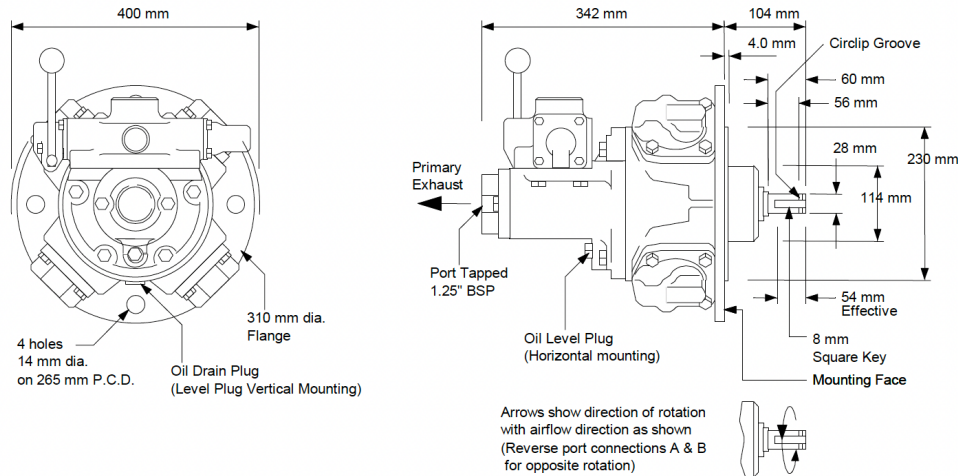
MOMENT OF INERTIA of rotating parts 4.1 gm² (motor only)

MAX OVERHUNG FORCE on motor shaft 1330 N (300 lbf)

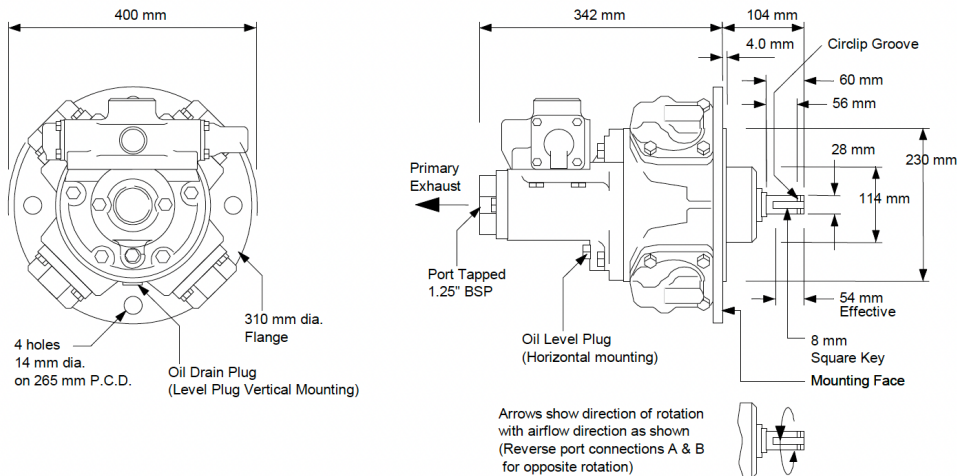
TEMPERATURE RANGE -20°C to +60°C (-4°F to +140°F) / -10°C to +60°C (-14°F to +140°F) with brake

Lubricator drop rate 6-8 drops/minute continuous operation
Lubricator drop rate 12-16 drops/minute intermittent operation

Dimensions & Performance RM410 + HCV



Dimensions & Performance RM410 + RCV



Operational principle RM410 Control Valve Options

This range of bolt on valves offers very sensitive speed and directional control. One frictional matched spool and sleeve assembly is offered with two alternative means of actuation.

Configuration

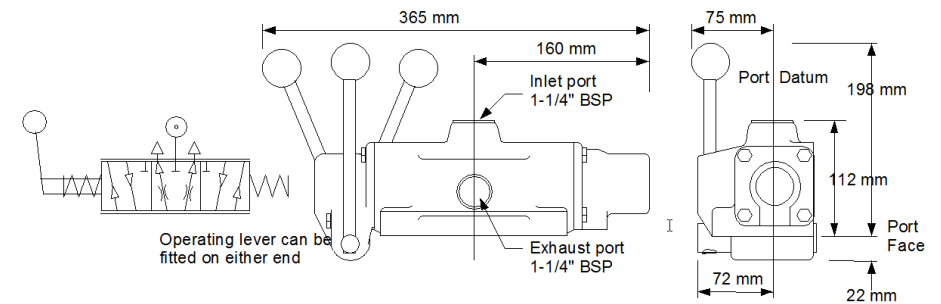
As standard these valves can be supplied with either **EQUAL POWER OR BIASED POWER** spools, the latter is suitable for hoisting applications (normal power for lifting - reduced power for lowering). The direction of reduced power must be stated when ordering **CW** or **CCW**, when viewed on the output shaft of the motor.

Hand Controlled (HCV) - The control valve spool is operated directly by a lever mechanism. Speed increase is obtained as the lever is moved in either direction from the centre (neutral) position.

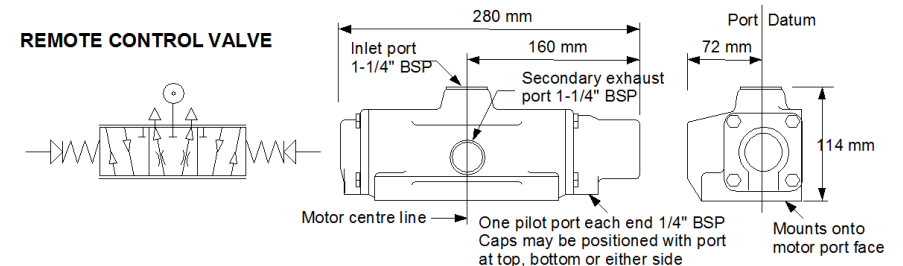
Remotely Controlled (RCV) - This option is usually controlled from a remote position by one of the PC series or LC2 remote controllers. A variable air pilot signal is applied to either end of the valve spool, depending on the required direction of motor rotation. The pilot pressure range is between 1.4 bar (20 psi) and 4.8 bar (70 psi), increased pilot pressure gives increased speed. The valve is spring centred to neutral.

Pressure Drop - Minimal pressure drop will be experienced through the valves, having the effect of maintaining the output torque whilst reducing the motor output speed by approximately 10-15% at 6 bar (90 psi) at maximum power. The starting torque remains unaffected.

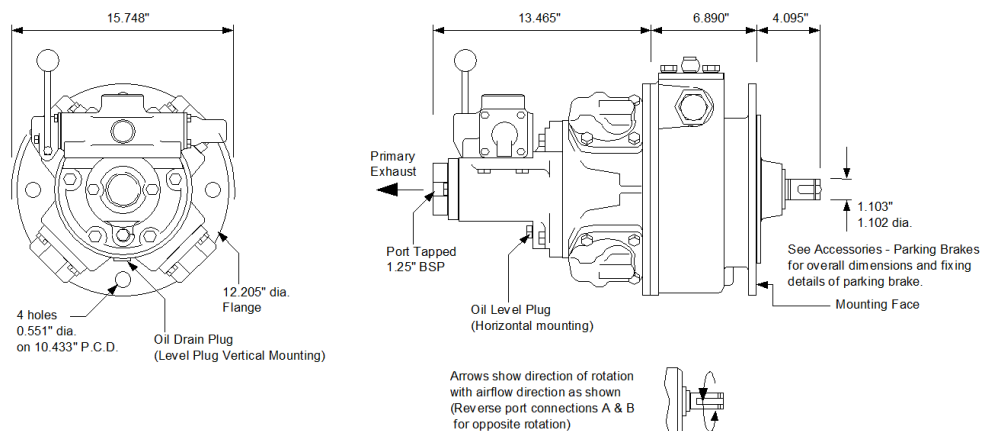
HAND CONTROL VALVE



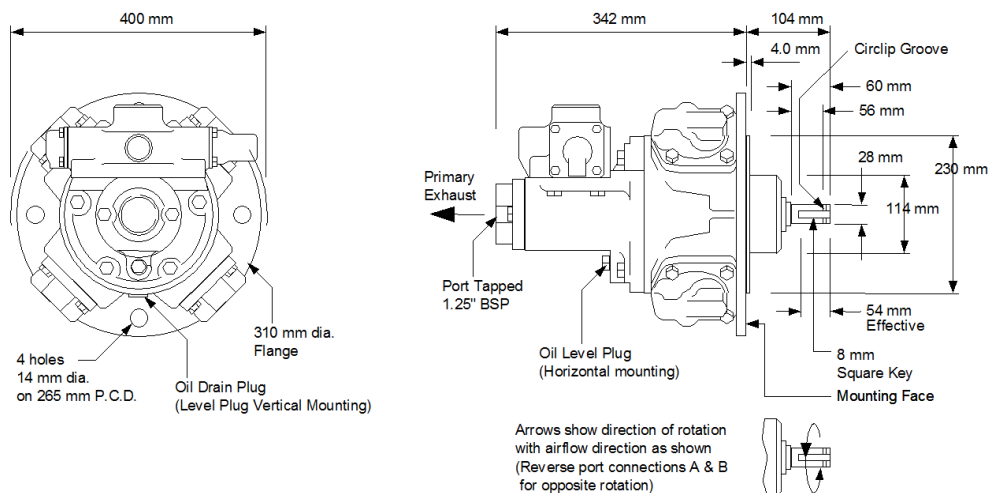
REMOTE CONTROL VALVE



Dimensions & Performance RM410 + Brake + HCV

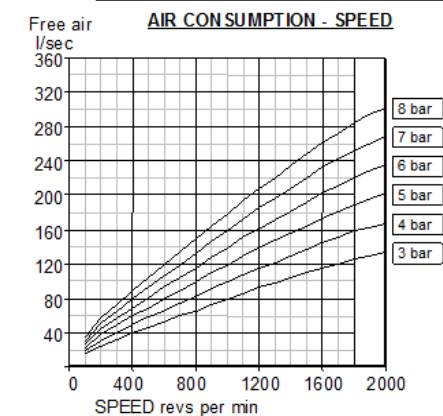
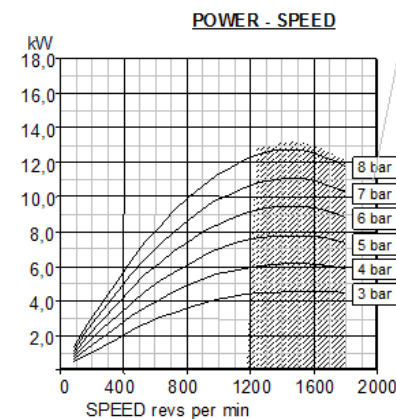
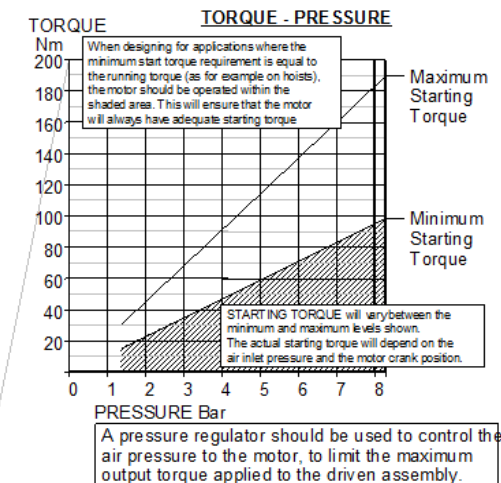
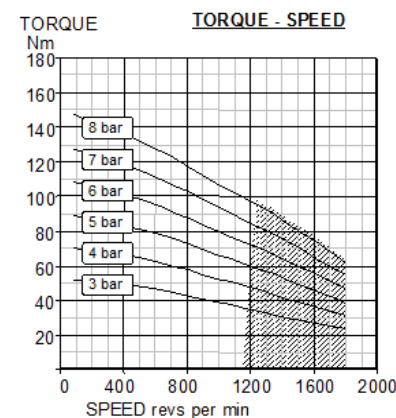


Dimensions & Performance RM410 + Brake + RCV



Gearbox ratio: None

Maximum speed: 1800 RPM
Control Valve Fitted



LUBRICATING OIL CAPACITIES

Horizontal 500ml Vertical 940ml

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AIRLINE FILTRATION AND LUBRICATION

Use 64 micron filtration or better. Choose a lubricator suitable for the flow required. Prior to initial start-up, inject oil into the inlet port.

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MOMENT OF INERTIA of rotating parts 4.1 gm² (motor only)

MAX OVERHUNG FORCE on motor shaft 1330 N (300 lbf)

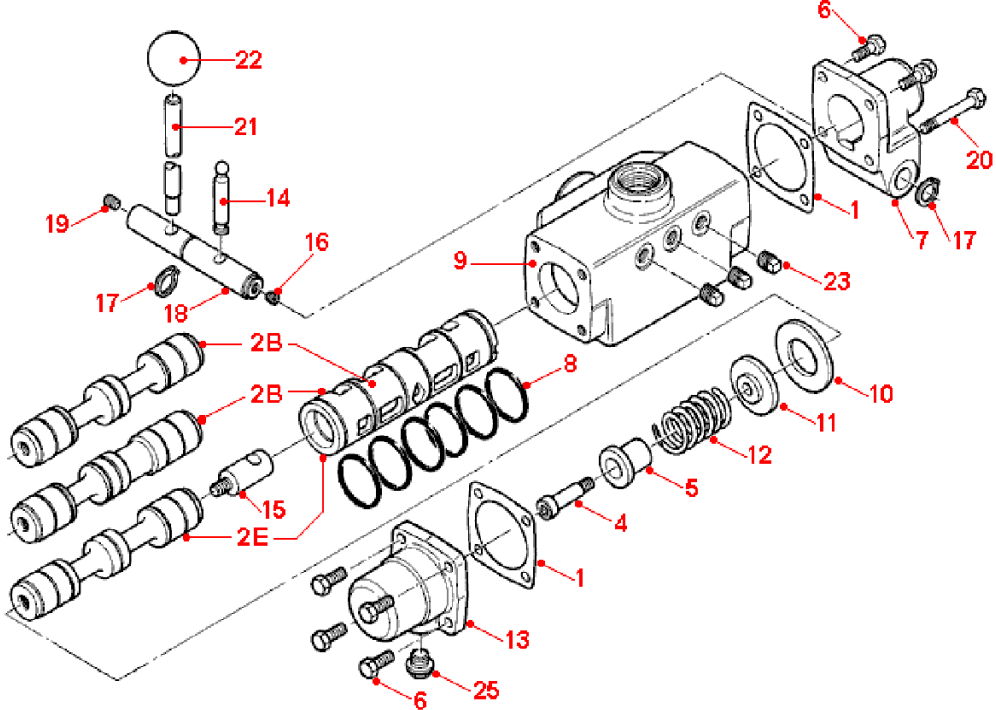
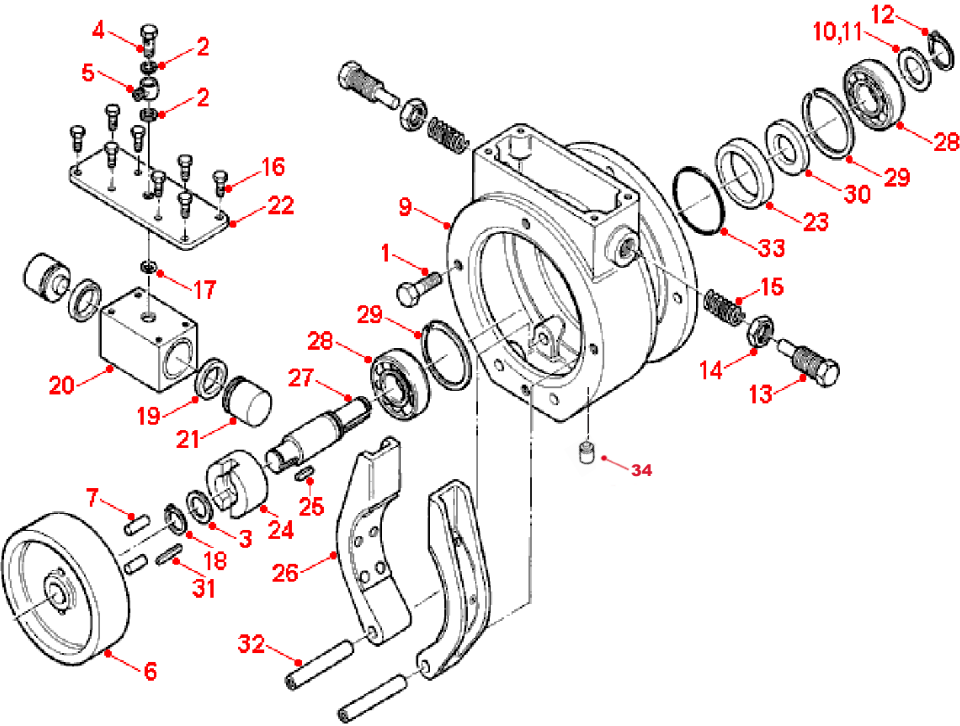
TEMPERATURE RANGE -20°C to +60°C (-4°F to +140°F) / -10°C to +60°C (-14°F to +140°F) with brake

Lubricator drop rate 6-8 drops/minute continuous operation

Lubricator drop rate 12-16 drops/minute intermittent operation

Spare Parts List Parking Brake

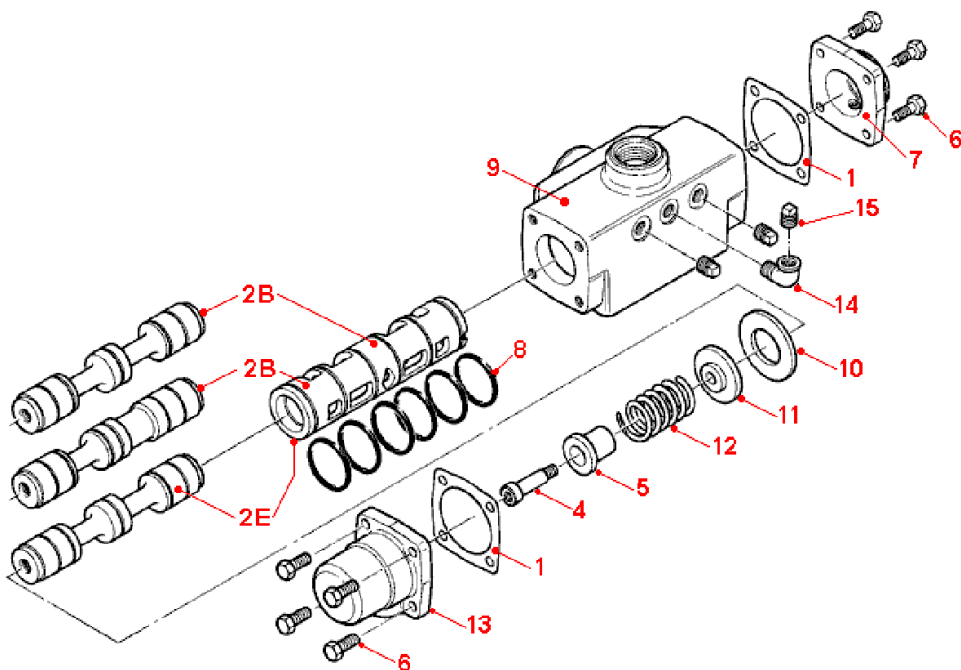
Spare Parts List Hand Control Valve



Item	Part No.	Description	Qty
01	802-073	Set Screw M12 x 30	4
02	808-090	Bonded Seal 1/4" BSP Dowty	2
03	412-034	Spacer-Output Shaft	1
04	816-004	Banjo Bolt Only 1/8 BSP	1
05	816-005	Banjo Bolt C/W/ Nut&Rin 5/16	1
06	412-001	Brake Wheel	1
07	806-002	Dowel Dia 12 x 35 lg	2
09	412-010	Brake Housing	1
10	430-049	Shim - Output	5
11	430-035	Output Shaft Spacer	1
12	804-016	Circlip 38mm External	1
13	412-009	Brake Spring Adjuster	2
14	412-024	Locknut	2
15	814-010	Spring 304114	2
16	802-031	Hex Head Screw M8 x 16	4
17	808-112	O Ring 11/16" x 7/8"	1
18	804-010	Circlip 28mm External	2
19	808-076	U Packing 210-319-4490	2
20	412-902A	Piston Block Assy	1
21	412-011	Brake Piston	2
22	412-013	Block Support Plate	1
23	430-083	Oil Seal Sleeve	1
24	812-131	Brake Shaft Driver	1
25	811-004	Key K121	1
26	412-901	Brake Shoe Assembly	2
27	412-133	Brake Shaft	1
28	807-013	Bearing 6308 2 RS	2
29	804-068	Circlip 90mm Internal	2
30	808-048	Oilseal 40x72x10/R21	1
31	811-005	Key K128	1
32	412-003	Brake Shoe Pivot	2
33	808-133	O Ring 3-1/2" ID x .139	1
34	7008G18	Breather plug 1/8 BSPP (ATEX only)	1

Item	Part No.	Description	Qty
01	311-066	End Cap Gasket	2
02E	431-913	Matched Spool and Sleeve	1 (Equipower)
02B	431-914	Matched Spool and Sleeve	1 (Biased)
4	817-002	Shoulder Screw 10 mm	1
5	311-071	Centering Shaft Guide	1
6	802-032	Hex Head Screw M8 x 20	6
7	313-041	O Ring 1-9/16" x 1-11/16"	1
8	808-010	O Ring 1-9/16" x 1-11/16"	6
9	431-060	Valve Body	1
10	311-068	Valve Sleeve Spacer	1
11	311-072	Washer, Spring Centering	1
12	814-015	Spring 343720	1
13	311-064	End Cap - Spring End	1
14	313-026	Toggle Pin	1
15	313-024	Toggle Shaft	1
16	815-010	Grub Screw M8 x 10	1
17	804-013	Circlip 20mm External	2
18	313-008	Hand Lever Pivot	1
19	815-002	Grub Screw M8 x 16	1
20	802-045	Hex Bolt M8 x 60	2
21	313-002	Hand Lever	1
22	818-002	Black Plastic Knob 1-1/2"	1
23	816-061	Plug 1/4" BSPT Sq. Head	3
25	113-050	Vent Plug	1

Spare Parts List Remote Control Valve



Item	Part No.	Description	Qty
1	311-066	End Cap Gasket	2
2E	431-093	Matched Spool and Sleeve	1 (Equipment)
2B	431-974	Matched Spool and Sleeve	1 (Blised)
5	817-002	Shower Screw 10mm	1
6	311-071	Centering Shaft Guide	1
6	802-032	Hex Head Screw M8 x 20	8
7	311-065	End Cap - Plain End	1
8	808-010	O-Ring 1-9/16" x 1-11/16"	6
9	431-060	Valve Body	1
10	311-068	Valve Sleeve Spacer	1
11	311-072	Washer, Spring Centering	1
12	311-073	Spring, Control Spool	1
13	311-064	End Cap - Spring End	1
14	816-048	Elbow 1/4" F / 1/4" BSP	1
15	816-074	Plug 1/4" BSP	3

Ordering code

Select easily with the ordering code your version and order it at our sales team. Do you have special wishes? For example ATEX Certified, different mountings, brakes etc. You name it and we make it possible. Contact us for your wishes and we will be happy to engineer a proposal to suit your requirements.

