

PT SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron/ Stainless Steel Material Available
- Die-cast Alloy Crankcase
- Aluminum Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with intergrated cooling
- High Volumetric Delivery Valve
- Symmetrical Design, Easy Shaft Conversion of Left to Right

SPECIFICATION

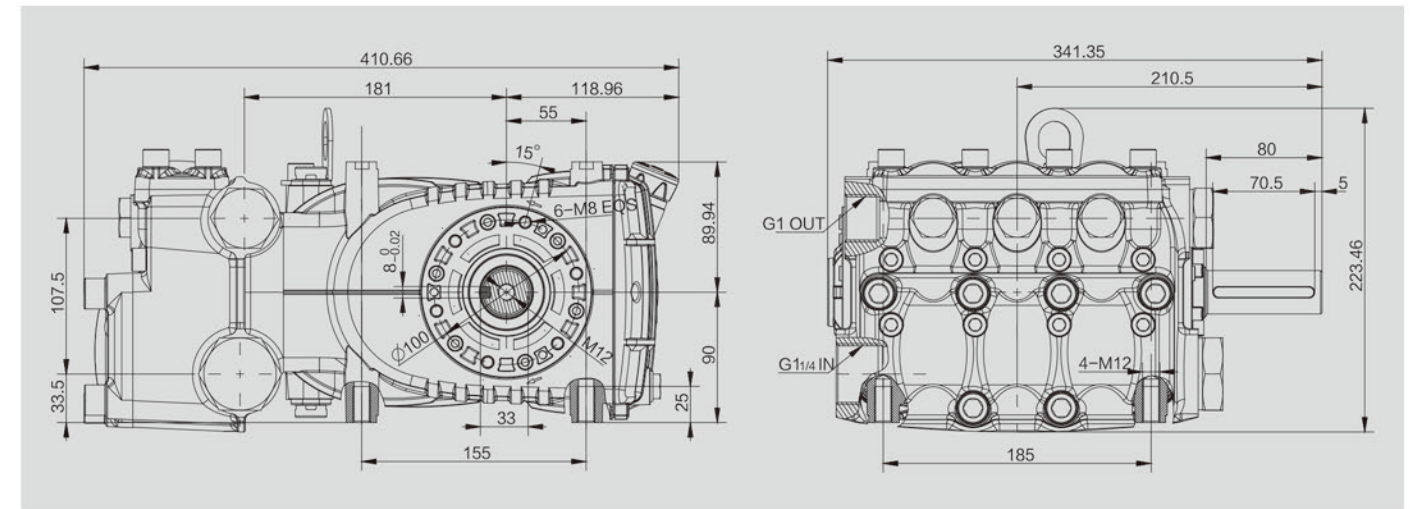
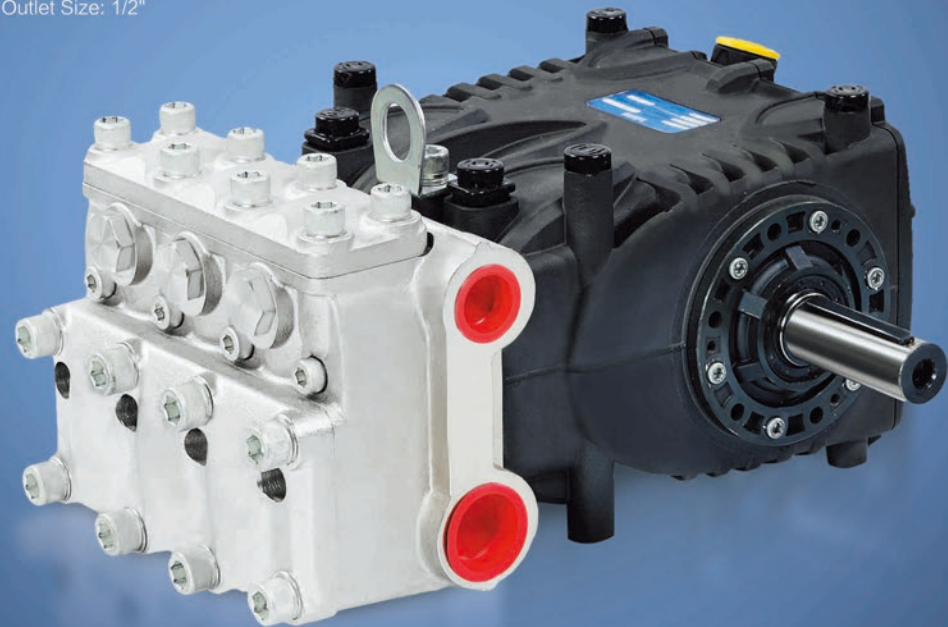
- Inlet Port: G1 1/4"
- Discharge Port: G 1"
- Oil Capacity: 2 Ltr
- Oil Code: SHELL 220
- Incoming Water Pressure: 3 Bar
- Water Temperature: 40 Celsius
- Male Shaft: 30 mm

APPLICATION

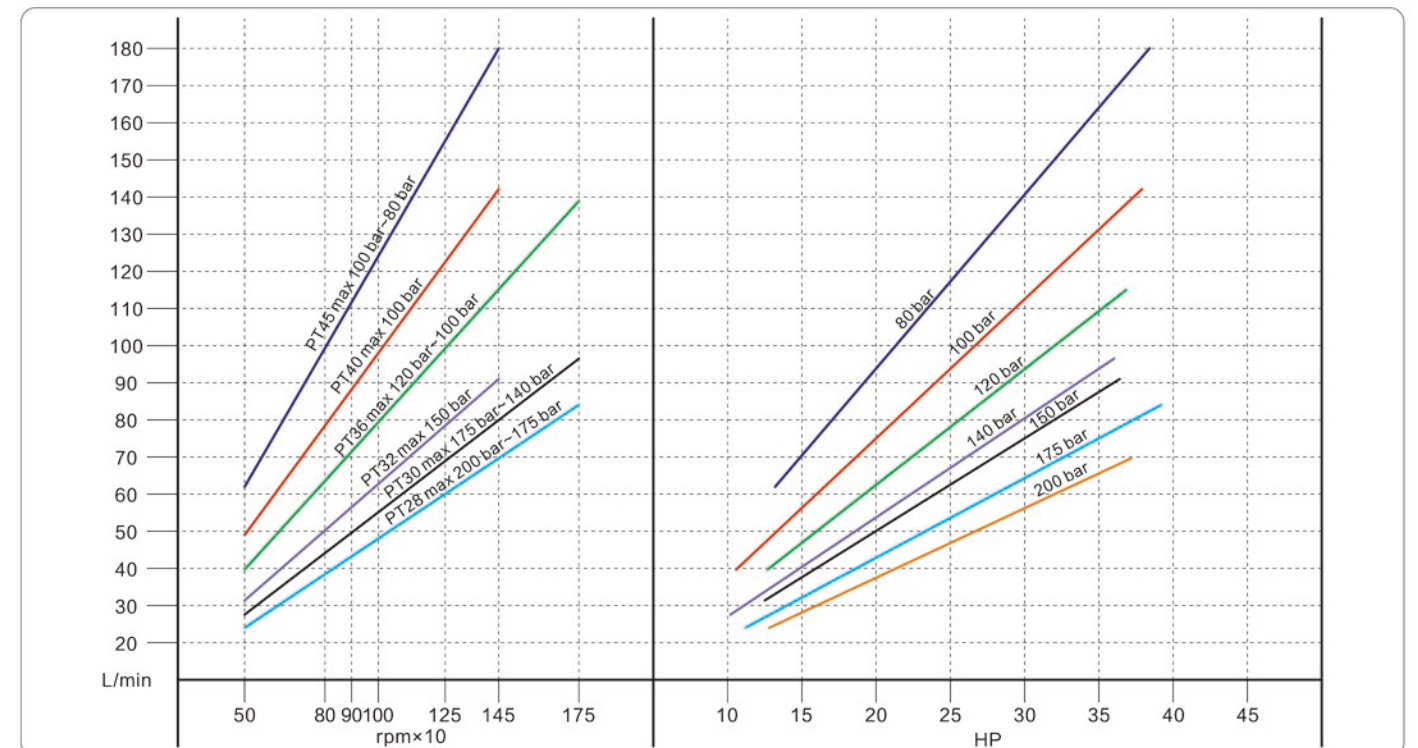
- Sewer Jetting, Drain Cleaning, Street Cleaning, Paint Stripping, Vehicles Cleaning, Metal Descaling, Hydrostatic Test, SWRO Plants, Mine Drilling in industries of Construction, Municipal Engineering, Petrochemical, Mining, Food

OPTIONAL PARTS

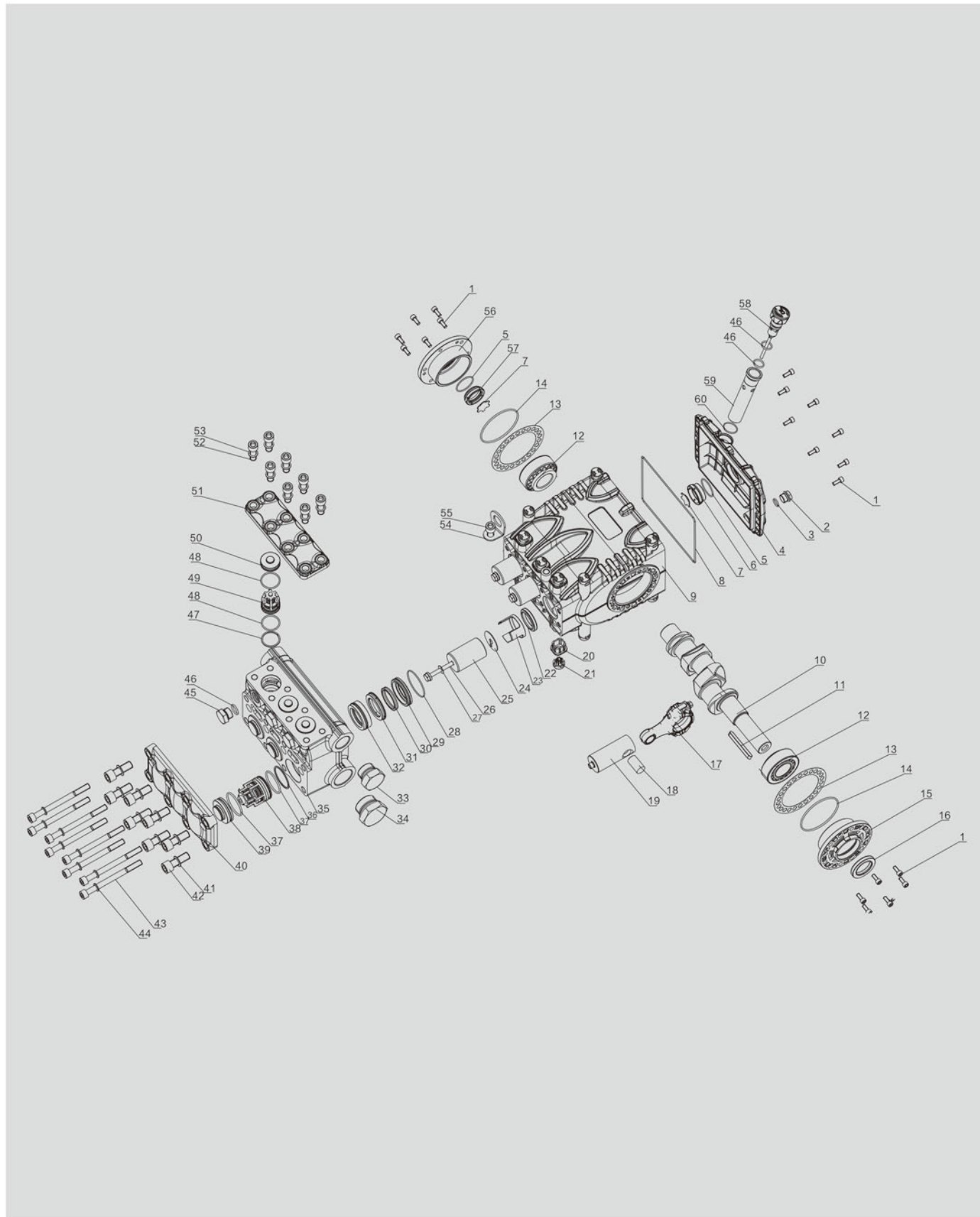
- (a) Unloader Valve
 - Rated Pressure: 170 Bar
 - Max Flow: 200 L/min
 - Port Sizes: 1"
 - Weight: 2.19 KG
- (b) Safety Valve
 - Max Pressure: 250 Bar
 - Max Flow: 200 L/min
 - Inlet Port Sizes: 3/4"; Outlet Size: 1/2"
 - Weight: 0.85 KG
- (c) Gear Reduction



Model	Flow Rate		Pressure			Speed	Power		Weight
	L/min	gpm	bar	p.s.i	Mpa	r.p.m	hp	kw	kg
PT28	70	18.4	200	2900	20	1450	36	26.6	44
	84	22.2	175	2538	17.5	1750	38	28.0	44
PT30	80	21.1	175	2538	17.5	1450	38	28.0	44
	96	25.5	140	2030	14	1750	36	26.6	44
PT32	91	24.0	150	2175	15	1450	37	27.3	44
PT36	115	30.4	120	1740	12	1450	37.5	27.6	44
	139	36.7	100	1450	10	1750	38	28.0	44
PT40	142	37.5	100	1450	10	1450	38	28.0	44
PT45	124	32.8	100	1450	10	1000	33	24.3	44
	111.6	29.5	100	1450	10	900	30	22.3	44
	99.2	26.2	100	1450	10	800	27	20	44



PT SPARE PARTS



PT DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201012	Screw	20	33	500010009	Plug	1
2	500010002	Plug	1	34	500010015	Plug	1
3	590101019	O-ring	1	35	501501010	PT30 Cylinder Head	1
4	501502420	PT Rear Cover	1	36	590103011	Washer	3
5	590101075	O-ring	2	37	590101082	O-ring	6
6	501201320	PF Side Oil Level	1	38	301191501	PT Checking Valve	3
7	501201330	PF Side Oil Indicator	2	39	501501150	PT Checking Valve Plug	3
8	590101048	O-ring	1	40	501501210	PT Checking Valve Cover	1
9	501502220	PT Crankcase	1	41	590204106	Washer	8
10	501502210	PT Crankshaft	1	42	590201020	Screw	8
11	500011005	Flat Key	1	43	590201034	Screw	8
12	590303006	Bearing	2	44	590204101	Washer	8
13	501502340	PT Washer	2	45	500010005	Plug	3
14	590101112	O-ring	2	46	590101036	O-ring	5
15	501502430	PT Connect Flange	1	47	590102010	Washer	3
16	590108010	TC Crankshaft Oil Seal	1	48	590101068	O-ring	6
17	301051501	PT Connecting Rod	3	49	301191502	PT Delivery Valve	3
18	501502400	PT Plunger Pin	3	50	501501200	PT Delivery Valve Plug	3
19	501502390	PT Plunger Rod	3	51	501501220	PT Delivery Cover	1
20	101715020	PT Square Cap	6	52	590201022	Screw	8
21	101715030	PT Round Cap	14	53	590204104	Washer	8
22	590107007	TC4 Plunger Oil Seal	3	54	501201350	PF Lift Ring	1
23	501502350	PT Support	3	55	590201026	Screw	1
24	501201340	PF Washer	3	56	501502410	PT Side Cover	1
25	501502240	PT30 Ceramic Plunger	3	57	501002130	DS Side Oil Level	1
26	501502330	PT Plunger Lock Bolt	3	58	301151201	PF Dipstick	1
27	501201460	PF Gasket	3	59	501502440	PT Dipstick Bushing	1
28	590101089	O-ring	3	60	590101061	O-ring	1
29	501501050	PT30 Rear Guide Ring	3				
30	590105008	PT30 Aux. Water Seal	3				
31	501501090	PT30 Support Ring	3				
32	590104014	30 Water Seal Kit	3				

PF SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron/ Stainless Steel Material Available
- Nitrited Alloy Crankcase
- Hardened Steel Crankshaft
- Aluminum Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Conversion of Left to Right
- Splash Lubrication

APPLICATION

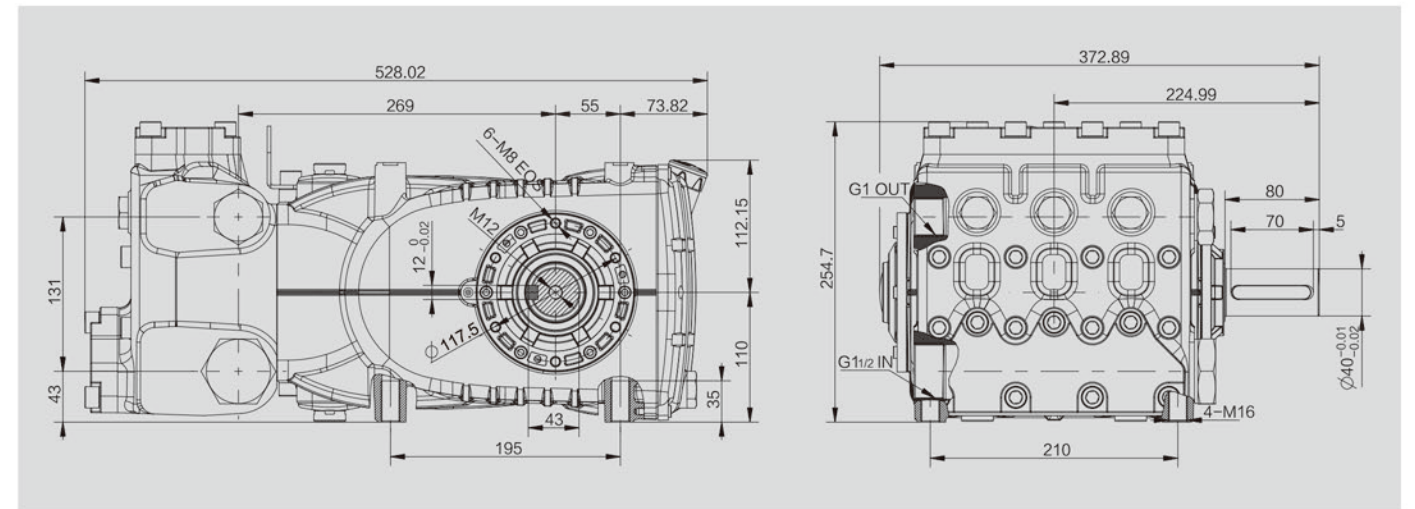
- Sewer Jetting, Drain Cleaning, Street Cleaning, Paint Stripping, Vehicles Cleaning, Metal Descaling, Hydrostatic Test, SWRO Plants, Mine Drilling and so on for industries of Construction, Municipal Engineering, Petrochemical, Mining, Food

OPTIONAL PARTS

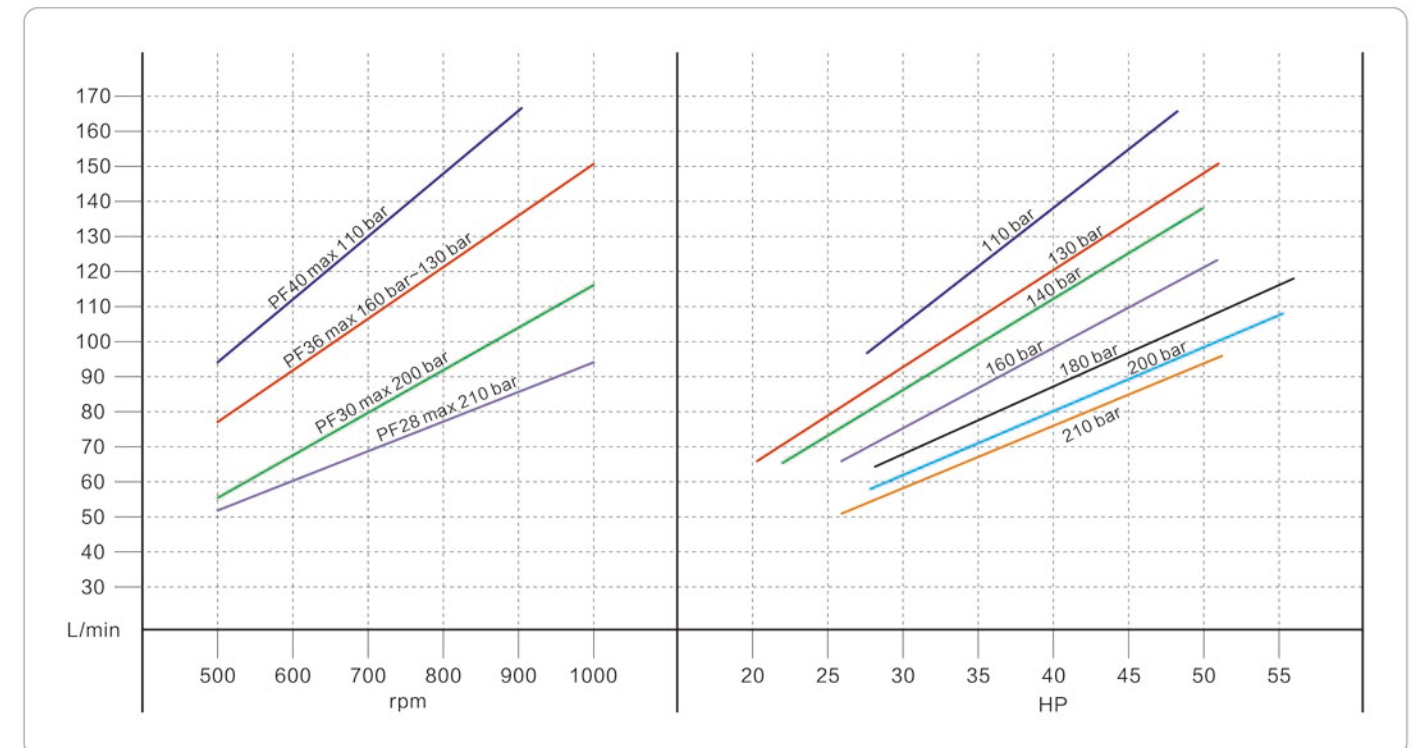
- (a) Unloader Valve
 - Rated Pressure: 170 Bar
 - Max Flow: 200 L/min
 - Port Sizes: 1"
 - Weight: 2.19 KG
- (b) Safety Valve
 - Max Pressure: 250 Bar
 - Max Flow: 200 L/min
 - Inlet Port Sizes: 3/4"; Outlet Size: 1/2"

SPECIFICATION

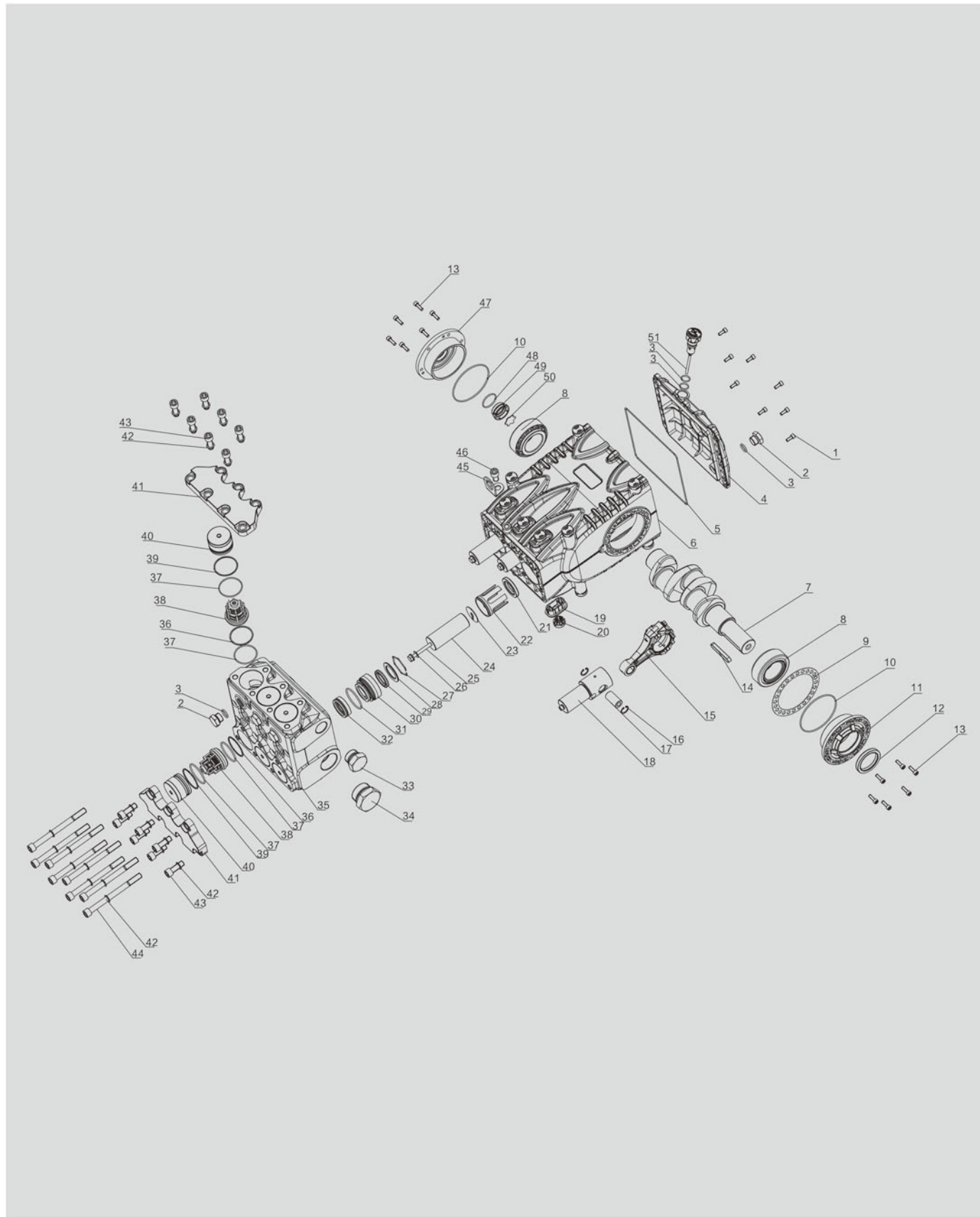
- Inlet Port: G1 1/2"
- Discharge Port: G 1"
- Oil Capacity: 3.8 Ltr
- Oil Code: SHELL 220
- Incoming Water Pressure: 3 Bar
- Water Temperature: 40 Celsius
- Male Shaft: 40 mm



Model	Flow Rate		Pressure			Speed r.p.m	Power		Weight kg
	L/min	gpm	bar	Mpa	p.s.i		hp	kw	
PF28	92	24.3	210	21	3045	1000	50	37.0	69
PF30	106	28.0	200	20	2900	1000	55	40.0	69
PF36	122	32.2	160	16	2320	800	50	37.0	69
	137	36.2	140	14	2030	900	50	37.0	69
	152.6	40.3	130	13	1885	1000	52	38.2	69
PF40	169	44.6	110	11	1595	900	49	36.0	69



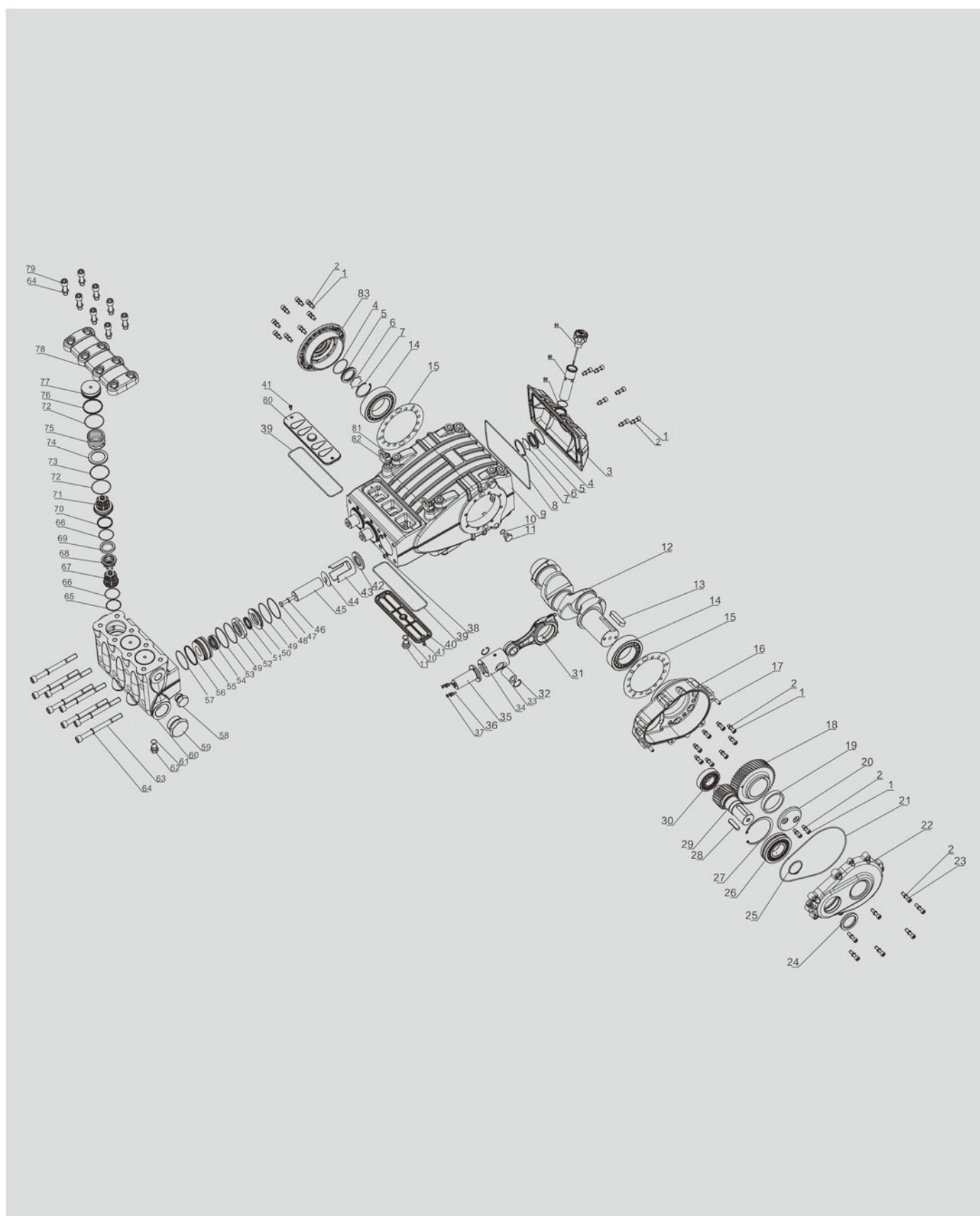
PF SPARE PARTS



PF DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201012	Screw	8	33	500010009	Plug	1
2	500010005	Plug	4	34	500010010	Plug	1
3	590101036	O-ring	6	35	501201010	PF30 Cylinder Head	1
4	501201370	PF Rear Cover	1	36	590102008	Was	6
5	590101057	O-ring	1	37	590101086	O-ring	12
6	501201410	PF Crankcase	1	38	301191201	PF Checking Valve	6
7	501201400	PF Crankshaft	1	39	590102009	Washer	6
8	590303005	Bearing	2	40	501201200	PF Valve Plug	6
9	501201420	PF Gasket	2	41	501201190	PF Valve Cover	2
10	590101117	O-ring	2	42	590204104	Washer	22
11	501201380	PF Connect Flange	1	43	590201022	Screw	14
12	590108009	TC Crankshaft Oil Seal	1	44	590201028	Screw	8
13	590201010	Screw	12	45	501201350	PF Lift Ring	1
14	500011004	Flat Key	1	46	590201026	Screw	1
15	301051201	PF Connecting Rod	3	47	501201390	PF Side Cover	1
16	590205008	Washer	6	48	590101075	O-ring	1
17	501201450	PF Plunger Pin	3	49	501201320	PF Side Oil Level	1
18	501201440	PF Plunger Rod	3	50	501201330	PF Side Oil Indicator	1
19	101712020	PF Square Cap	6	51	301151201	PF Dipstick	1
20	101712030	PF Round Cap	14				
21	590107006	TC4 Plunger Oil Seal	3				
22	501201430	PF Support	3				
23	501201340	PF Washer	3				
24	501201220	PF30 Ceramic Plunger	3				
25	501201310	PF Plunger Lock Bolt	3				
26	501201460	PF Washer	3				
27	501201360	PF Aux. Water Seal Clip	3				
28	501201050	PF30 Aux. Water Seal Ring	3				
29	590104024	PF30 Aux. Water Seal	3				
30	501201090	PF30 Rear Guide Ring	3				
31	590101084	O-ring	3				
32	590104014	Water Seal Kit 30	3				

XW SPARE PARTS



XW DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201032	Screw	24	44	501902660	XW Washer	3
2	590204101	Gasket	31	45	501902470	XW28 Ceramic Plunger	3
3	501902680	XW Rear Cover	1	46	501902800	XW Washer	3
4	590101098	O-ring	2	47	501902750	XW Plunger Lock Bolt	3
5	501902820	XW Oil Level	2	48	590102011	Washer	3
6	501902830	XW Oil Indicator	2	49	590101112	O-ring	6
7	590205009	Washer	2	50	501901040	XW28 Rear Guide Ring	3
8	590101062	O-ring	1	51	590105007	28 Aux. Water Seal	3
9	501902720	XW Crankcase	1	52	501901110	XW28 Support Ring	3
10	590101036	O-ring	3	53	590103012	Washer	3
11	500010005	Plug	3	54	590104018	28 Main Water Seal Kit	3
12	501902710	XW Crankshaft	1	55	501901180	XW28 Main Water Seal Kit Bush	3
13	500011007	Flat Key	1	56	590103014	Washer	3
14	590304001	Bearing	2	57	590101108	O-ring	3
15	501902700	XW Seal Ring	2	58	500010009	Plug	1
16	501902620	XW Gearbox	1	59	500010016	Plug	1
17	501902600	XW Set Pin	2	60	501901010	XW40 Cylinder Head	1
18	501902960	XW Driven Gear	1	61	590101034	O-ring	3
19	501902640	XW Driven Gear Gasket	1	62	500010017	Plug	3
20	501902650	XW Driven Gear Plate	1	63	590201019	Screw	8
21	590101062	O-ring	1	64	590204109	Gasket	16
22	501902610	XW Gearbox Cover	1	65	590102012	Washer	3
23	590201031	Screw	7	66	590101088	O-ring	6
24	590108012	TC Crankshaft Oil Seal	1	67	301191901	XW40 Checking Valve	3
25	590206006	Washer	1	68	501901440	XW40 Checking Valve Support	3
26	590305001	Bearing	1	69	501901430	XW40 Checking Valve Gasket	3
27	590205011	Washer	1	70	590103013	Washer	6
28	500011006	Flat Key	1	71	301191902	XW40 Delivery Valve	3
29	501902970	XW Driving Gear	1	72	590101103	O-ring	6
30	590304002	Bearing	1	73	590102013	Washer	3
31	301051901	XW Connecting Rod	3	74	501901370	XW40 Delivery Valve Ring	3
32	590205010	Washer	6	75	501901420	XW40 Valve Plug Spring	3
33	501902790	XW Plunger Pin	3	76	590103015	Washer	6
34	501902690	XW Piston	3	77	501901410	XW40 Valve Plug	3
35	501902780	XW Piston Rod	3	78	501901380	XW40 Valve Cover	1
36	590204102	Washer	12	79	590201036	Screw	8
37	590201010	Bolt	12	80	501902740	XW Top Cover	1
38	590101178	O-ring	6	81	501902670	XW Lift Ring	2
39	590101056	O-ring	2	82	590201018	Screw	2
40	501902740	XW Bottom Cover	1	83	501902810	XW Side Cover	1
41	590201014	Screw	4	84	301151901	XW Dipstick	1
42	590107008	TC4 Plunger Oil Seal	3	85	501902840	XW Dipstick Bushing	1
43	501902760	XW Support	3	86	590101076	O-ring	1

XW55 SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron, Nickel Treatment/ Stainless Steel Material Available
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- External Gearbox
- Drain Valve

APPLICATION

- Sewer Jetting, Drain Cleaning, Street Cleaning, Paint Stripping, Vehicles Cleaning, Metal Descaling, Hydrostatic Test, SWRO Plants, Mine Drilling and so on for industries of Construction, Municipal Engineering, Petrochemical, Mining, Food

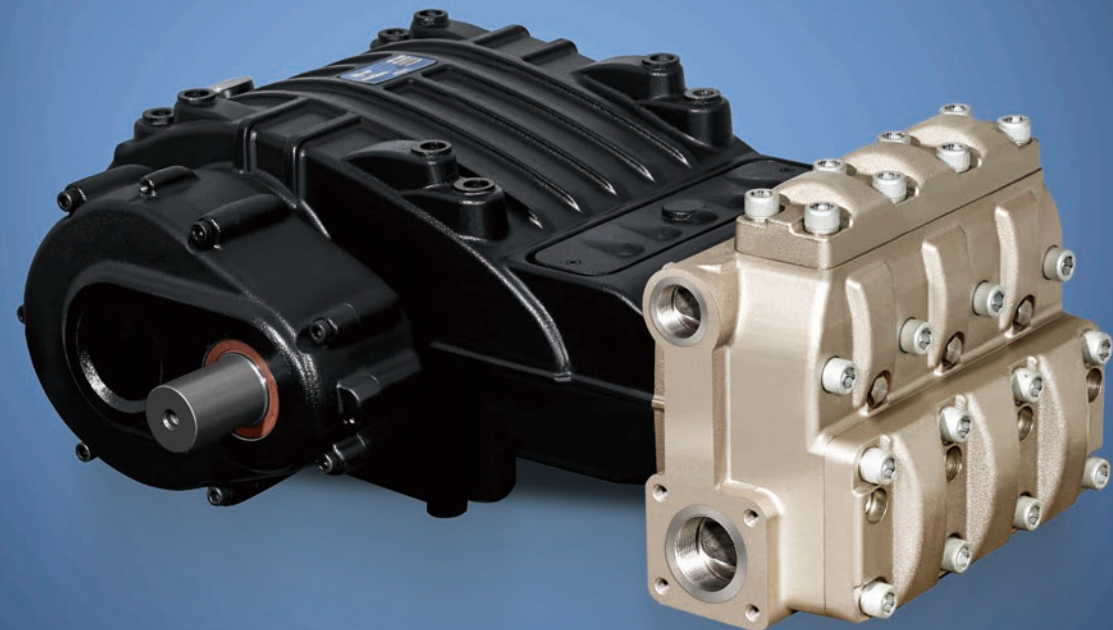
OPTIONAL PARTS

(a) Unloader Valve

- Rated Pressure : 200 Bar
- Max Flow: 200 L/min
- Port Sizes: 1"
- Weight: 3.58 KG

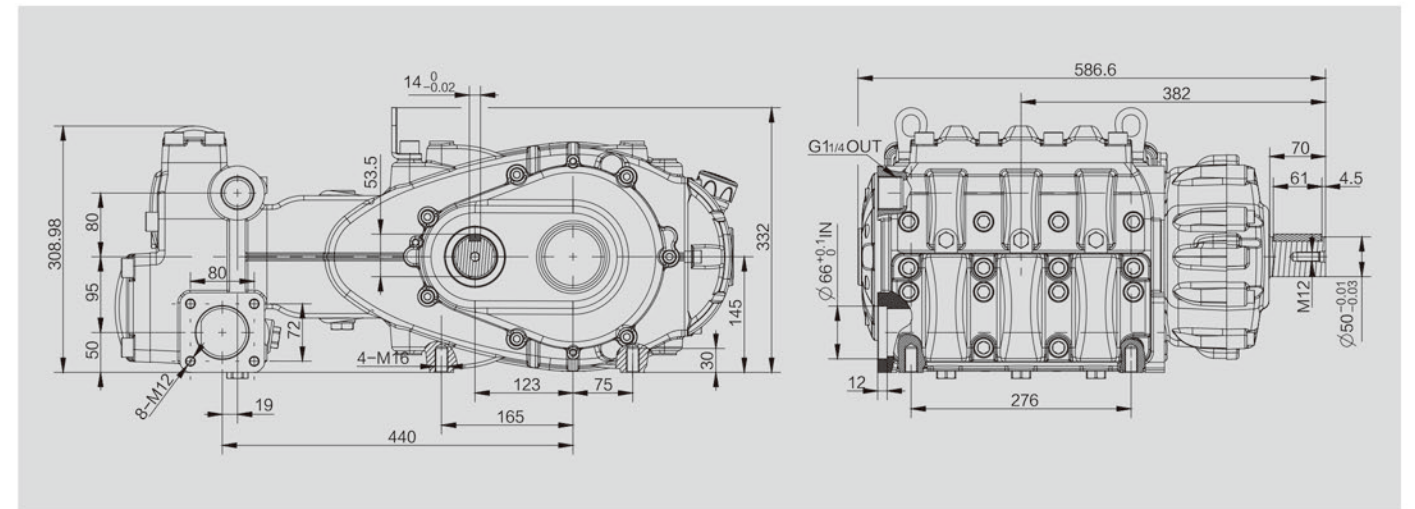
(b) Safety Valve

- Max Pressure : 250 Bar
- Max Flow: 200 L/min
- Inlet Port Sizes: 3/4"; Outlet Size: 1/2"
- Weight: 0.85 KG

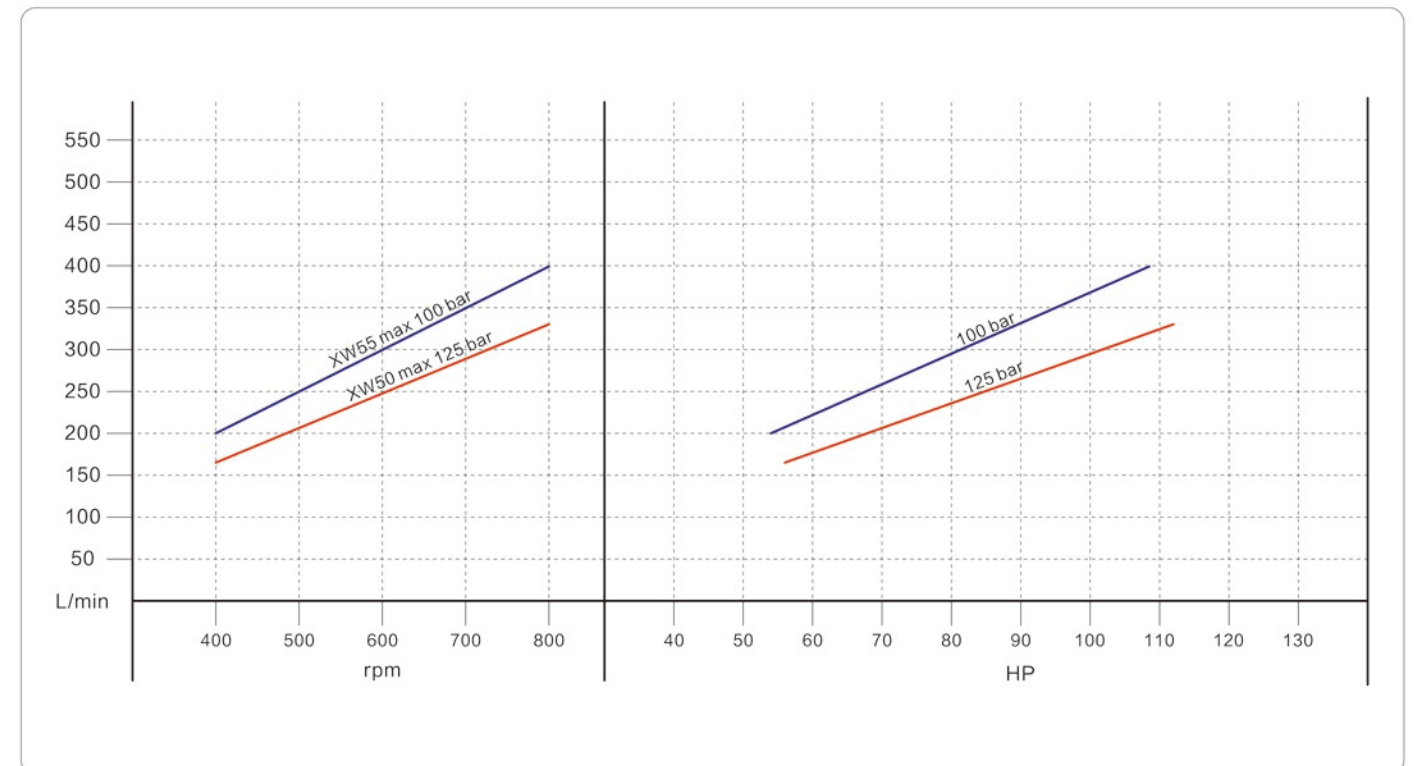


SPECIFICATION

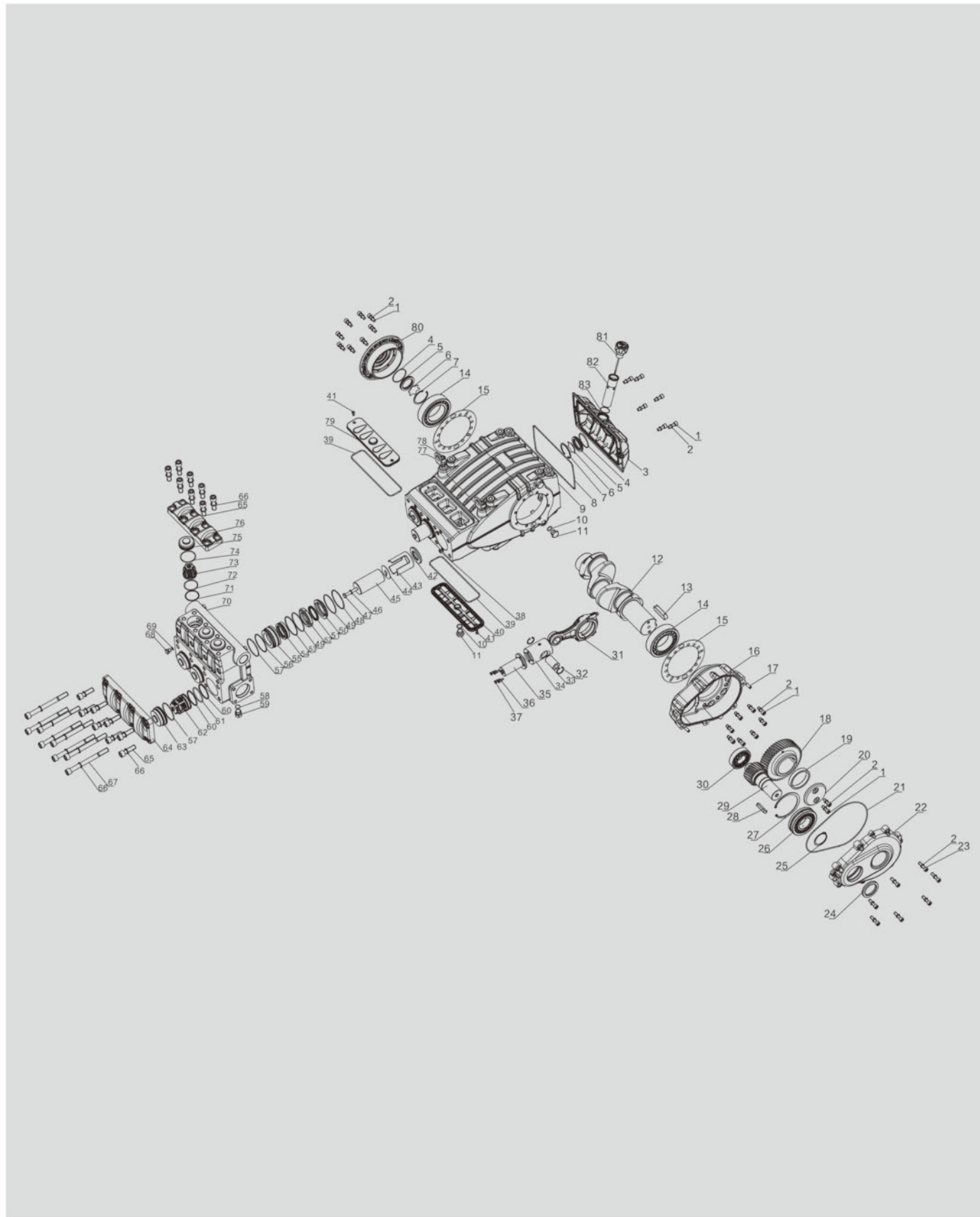
- Inlet Port: G 2"
- Discharge Port: G 1"
- Oil Capacity: 8.5 Ltr
- Oil Code: SHELL 220
- Incoming Water Pressure: 3 Bar
- Water Temperature: 40 Celsius
- Male Shaft: 50 mm



Model	Flow Rate		Pressure			Speed (r.p.m)			Power		Weight
	L/min	gpm	bar	p.s.i	Mpa	1:1.87	1:2.23	1:2.72	hp	kw	kg
XW50	330	87.2	125	1813	12.5	1500/1800/2200			112	82	
XW55	399	105.4	100	1450	10	1500/1800/2200			108	79	



XW55 SPARE PARTS



XW55 DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201032	Screw	24	43	501902760	XW Support	3
2	590204101	Gasket	37	44	501902660	XW Washer	3
3	501902680	XW Rear Cover	1	45	501902520	XW50 Ceramic Plunger	3
4	590101098	O-ring	2	46	501902800	XW Washer	3
5	501902820	XW Oil Level	2	47	501902750	XW Plunger Lock Bolt	3
6	501902830	XW Oil Indicator	2	48	590102011	Washer	3
7	590205009	Washer	2	49	590101112	O-ring	6
8	590101062	O-ring	1	50	501901090	XW50 Rear Guide Ring	3
9	501902720	XW Crankcase	1	51	590105013	50 Aux. Water Seal	3
10	590101036	O-ring	3	52	501901160	XW50 Support Ring	3
11	500010005	Plug	3	53	590103012	Washer	3
12	501902710	XW Crankshaft	1	54	590104020	50 Main Water Seal Kit	3
13	500011007	Flat Key	1	55	501901230	XW50 Main Water Seal Kit Bush	3
14	590304001	Bearing	2	56	590103014	Washer	3
15	501902700	XW Seal Gasket	2	57	590101108	O-ring	6
16	501902620	XW Gearbox	1	58	590101034	O-ring	6
17	501902600	XW Set Pin	2	59	500010017	XW Plug	6
18	501902960	XW Driven Gear	1	60	590102014	Washer	6
19	501902640	XW Driven Gear Gasket	1	61	590101096	O-ring	6
20	501902650	XW Driven Gear Plate	1	62	301191903	XW55 Checking Valve	3
21	590101062	O-ring	1	63	501901450	XW55 Checking Valve Plug	3
22	501902610	XW Gearbox Cover	1	64	501901390	XW55 Checking Valve Cover	3
23	590201031	Screw	7	65	590201036	Screw	1
24	590108012	TC Crankshaft Oil Seal	1	66	590204109	Gasket	16
25	590206006	Washer	1	67	590201019	Screw	24
26	590305001	Bearing	1	68	500010018	XW Plug	8
27	590205011	Washer	1	69	590101004	O-ring	3
28	500011006	Flat Key	1	70	501901030	XW55 Cylinder Head	3
29	501902970	XW Driving Gear	1	71	590102012	Washer	1
30	590304002	Bearing	1	72	590101088	O-ring	3
31	301051901	XW Connecting Rod	3	73	301191901	XW40 Delivery Valve	3
32	590205010	Washer	6	74	590101094	O-ring	3
33	501902790	XW Plunger Pin	3	75	501901460	XW55 Delivery Valve Plug	3
34	501902690	XW Piston	3	76	501901400	XW55 Delivery Valve Cover	3
35	501902780	XW Piston Rod	3	77	501902670	XW Lift Ring	1
36	590204102	Gasket	12	78	590201018	Screw	2
37	590201010	Bolt	12	79	501902740	XW Top Cover	2
38	590101178	O-ring	6	80	501902810	XW Side Cover	1
39	590101056	O-ring	2	81	301151901	XW Dipstick	1
40	501902740	XW Bottom Cover	1	82	501902840	XW Dipstick Bushing	1
41	590201014	Screw	4	83	590101076	O-ring	1
42	590107008	TC4 Plunger Oil Seal	3				

XV SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron, Nickel Treatment/ Stainless Steel Material Available
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- Drain Valve

SPECIFICATION

- Inlet Port: G 2"
- Discharge Port: G 1"
- Oil Capacity: 8.5 Ltr
- Oil Code: SHELL 220
- Incoming Water Pressure: 3 Bar
- Water Temperature: 40 Celsius
- Male Shaft: 70 mm

APPLICATION

- Sewer Jetting, Drain Cleaning, Street Cleaning, Paint Stripping, Vehicles Cleaning, Metal Descaling, Hydrostatic Test, SWRO Plants, Mine Drilling and so on for industries of Construction, Municipal Engineering, Petrochemical, Mining, Food

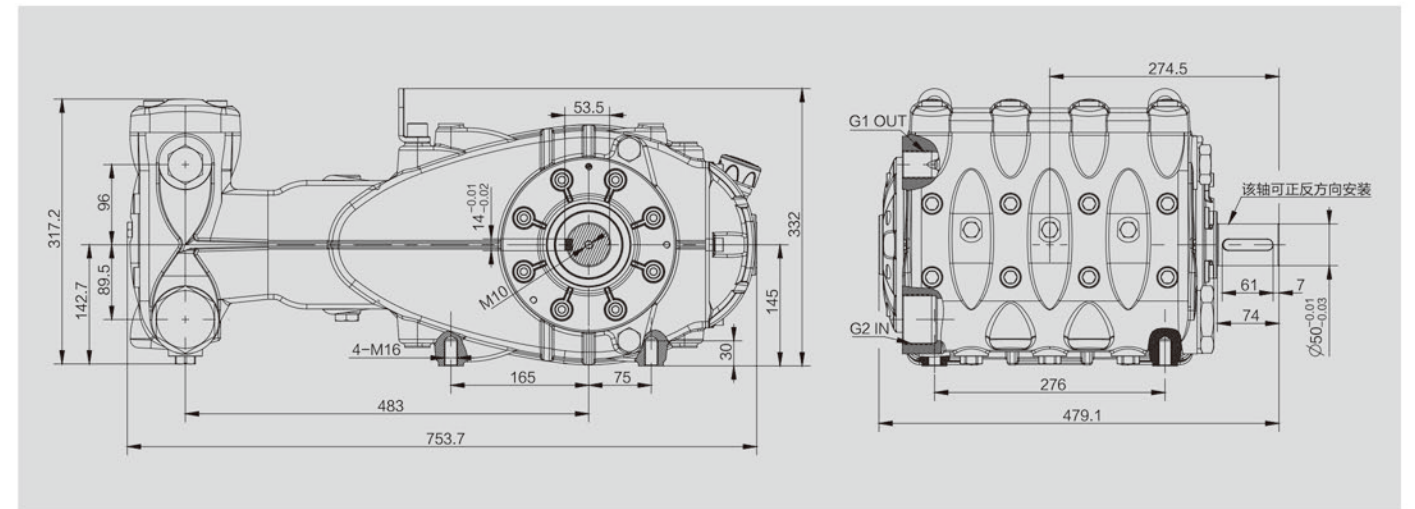
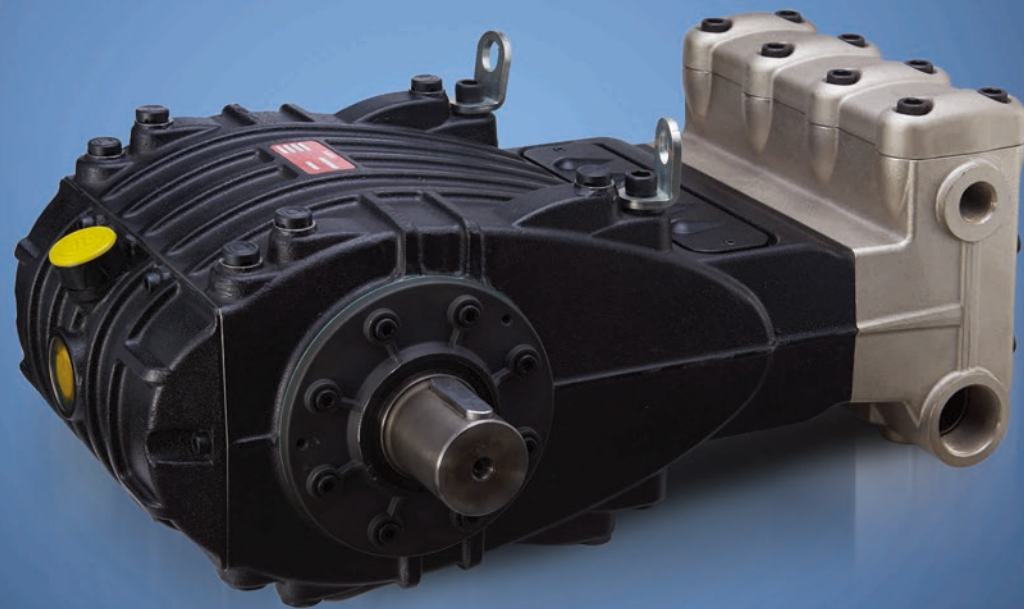
OPTIONAL PARTS

(a) Unloader Valve

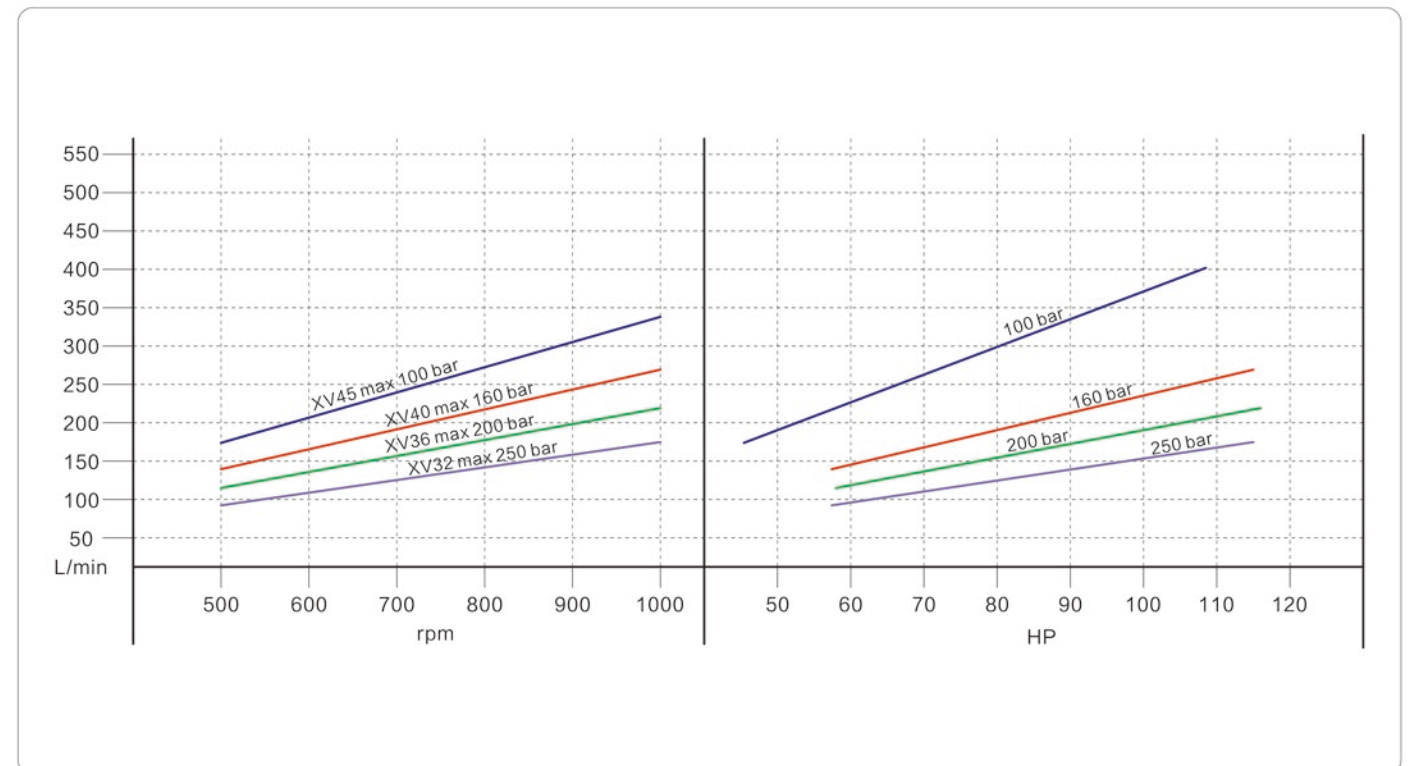
- Rated Pressure : 200 Bar
- Max Flow: 200 L/min
- Port Sizes: 1"
- Weight: 3.58 KG

(b) Safety Valve

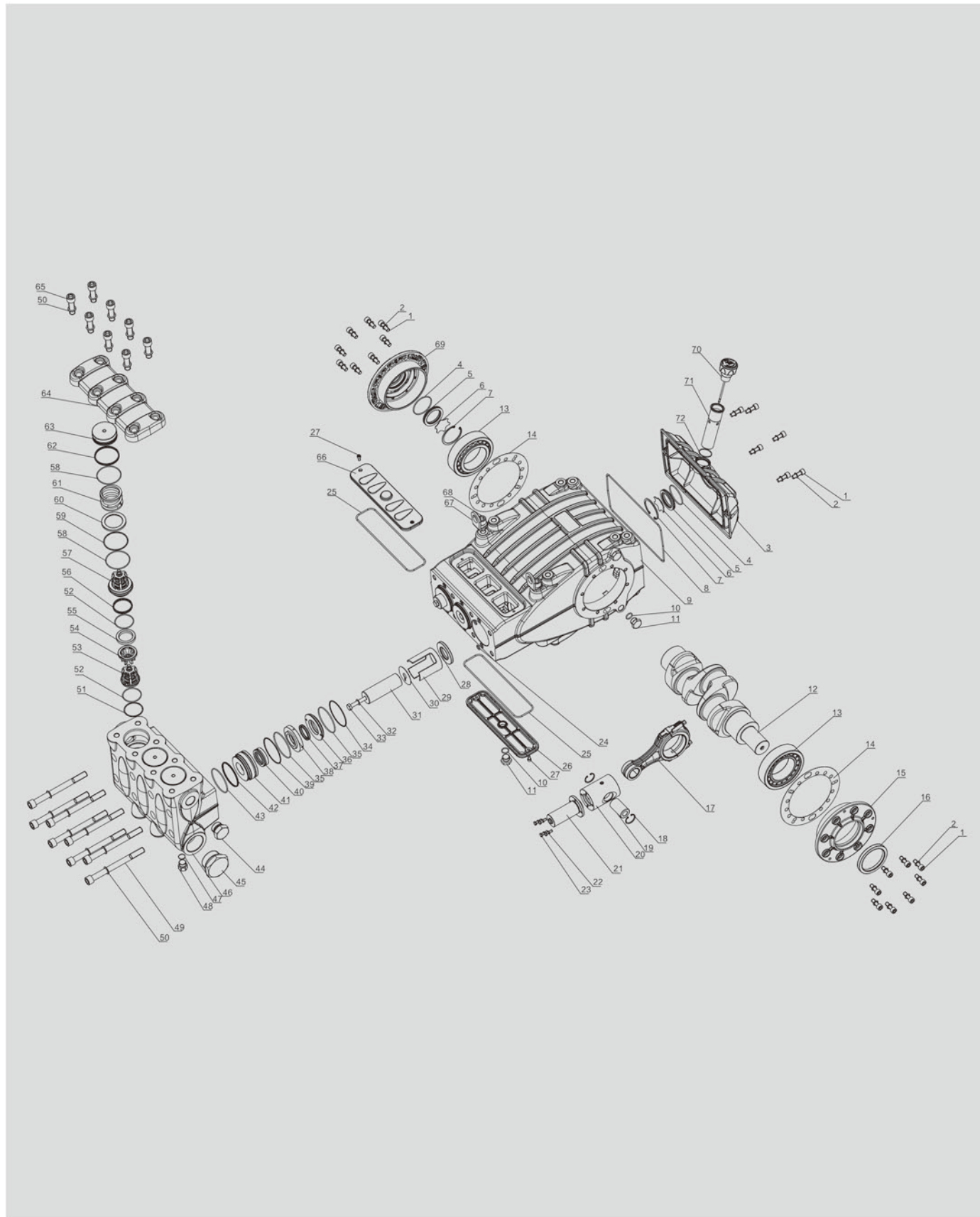
- Max Pressure : 250 Bar
- Max Flow: 200 L/min
- Inlet Port Sizes: 3/4"; Outlet Size: 1/2"
- Weight: 0.85 KG



Model	Flow Rate		Pressure			Speed	Power		Weight
	L/min	gpm	bar	p.s.i	Mpa	r.p.m	hp	kw	kg
XV32	168	44.9	250	3625	25	1000	113	83	209
XV36	213	56.2	200	2900	20	1000	113	83	209
XV40	263	69.5	160	2320	16	1000	113	83	209
XV45	333	88	100	1450	10	1000	88	65	209



XV SPARE PARTS



XV DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201032	Screw	22	37	590105007	28 Aux. Water Seal	3
2	590204101	Gasket	28	38	501901110	XW28 Support Ring	3
3	501902680	XW Rear Cover	1	39	590103012	Washer	3
4	590101098	O-ring	2	40	590104018	28 Main Water Seal Set	3
5	501902820	XW Oil Level	2	41	501901180	XW28 Main Water Seal Bush	3
6	501902830	XW Oil Indicator	2	42	590103014	Washer	3
7	590205009	Washer	2	43	590101108	O-ring	3
8	590101062	O-ring	1	44	500010005	Plug	1
9	501902720	XW Crankcase	1	45	500010016	Plug	1
10	590101036	O-ring	3	46	501901010	XW40 Cylinder Head	1
11	500010005	Plug	3	47	590101034	O-ring	3
12	502002010	XV Crankshaft	1	48	500010017	XW Plug	3
13	590304001	Bearing	2	49	590201019	Screw	8
14	501902700	XW Seal Ring	2	50	590204109	Gasket	16
15	502002020	XV Connect Flange	1	51	590102012	Washer	3
16	590108011	TC Crankshaft Oil Seal	1	52	590101088	O-ring	6
17	301051901	XW Connect Rod	3	53	301191901	XW40 Suction Valve	3
18	590205010	Washer	6	54	501901440	XW40 Suction Valve Support	3
19	501902790	XW Plunger Pin	3	55	501901430	XW40 Suction Valve Washer	3
20	501902690	XW Piston	3	56	590103013	Washer	6
21	501902780	XW Plunger Rod	3	57	301191902	XW40 Delivery Valve	3
22	590204102	Gasket	12	58	590101103	O-ring	6
23	590201010	Bolt	12	59	590102013	Washer	3
24	590101178	O-ring	6	60	501901370	XW40 Delivery Valve Ring	3
25	590101056	O-ring	2	61	501901420	XW40 Valve Plug Spring	3
26	501902740	XW Bottom Cover	1	62	590103015	Washer	6
27	590201014	Screw	4	63	501901410	XW40 Valve Plug	3
28	590107008	TC4 Plunger Oil Seal	3	64	501901380	XW40 Valve Cover	1
29	501902760	XW Support	3	65	590201036	Screw	8
30	501902660	XW Washer	3	66	501902740	XW Top Cover	1
31	501902470	XW28 Ceramic Plunger	3	67	501902670	XW Lift Ring	2
32	501902800	XW Washer	3	68	590201018	Screw	2
33	501902750	XW Plunger Lock Bolt	3	69	501902810	XW Side Cover	1
34	590102011	Washer	3	70	301151901	XW Dipstick	1
35	590101112	O-ring	6	71	501902840	XW Dipstick Bush	1
36	501901040	XW28 Rear Guide Ring	3	72	590101076	O-ring	1

XV55 SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron, Nickel Treatment/ Stainless Steel Material Available
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- Drain Valve

SPECIFICATION

- Inlet Port: G 2"
- Discharge Port: G 1"
- Oil Capacity: 8.5 Ltr
- Oil Code: SHELL 220
- Incoming Water Pressure: 3 Bar
- Water Temperature: 40 Celsius
- Male Shaft: 70 mm

APPLICATION

- Sewer Jetting, Drain Cleaning, Street Cleaning, Paint Stripping, Vehicles Cleaning, Metal Descaling, Hydrostatic Test, SWRO Plants, Mine Drilling and so on for industries of Construction, Municipal Engineering, Petrochemical, Mining, Food

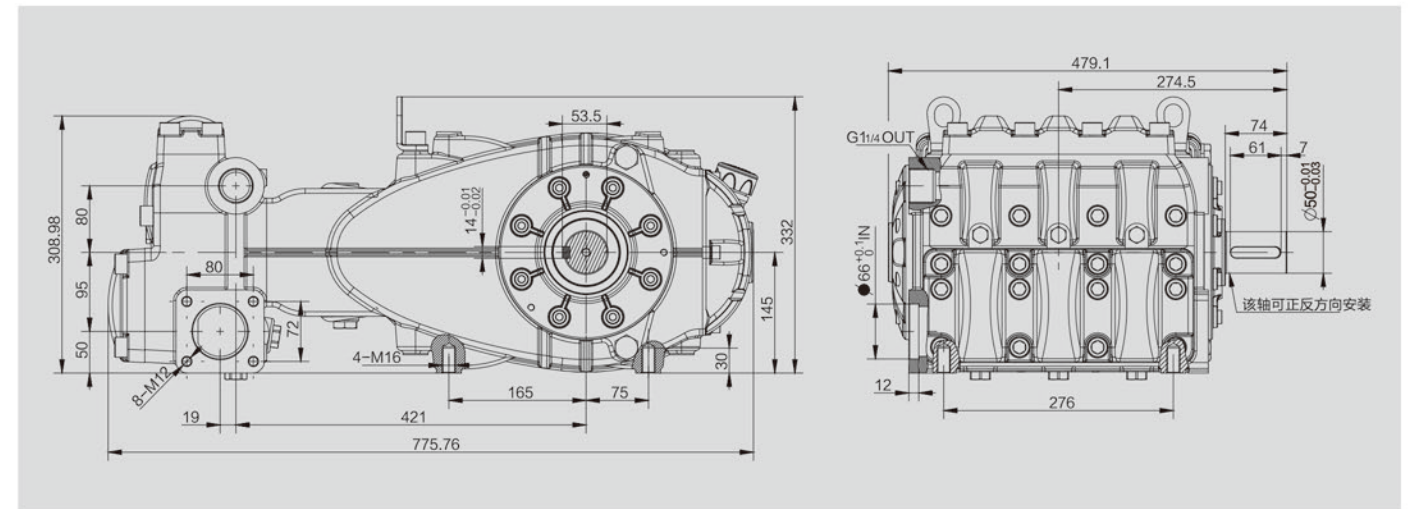
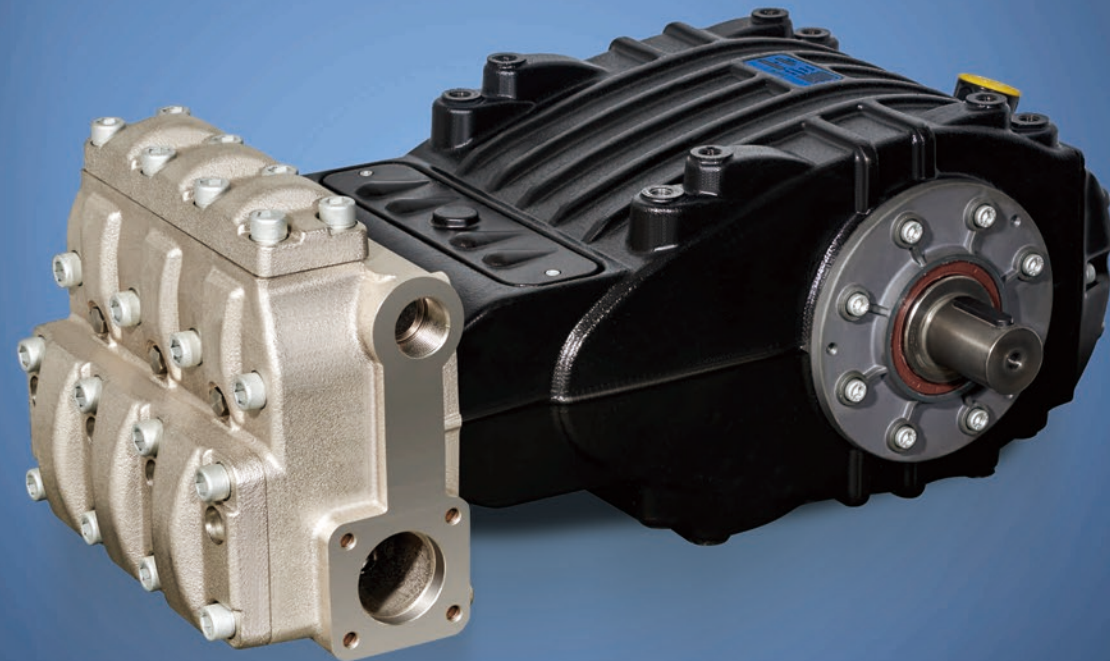
OPTIONAL PARTS

(a) Unloader Valve

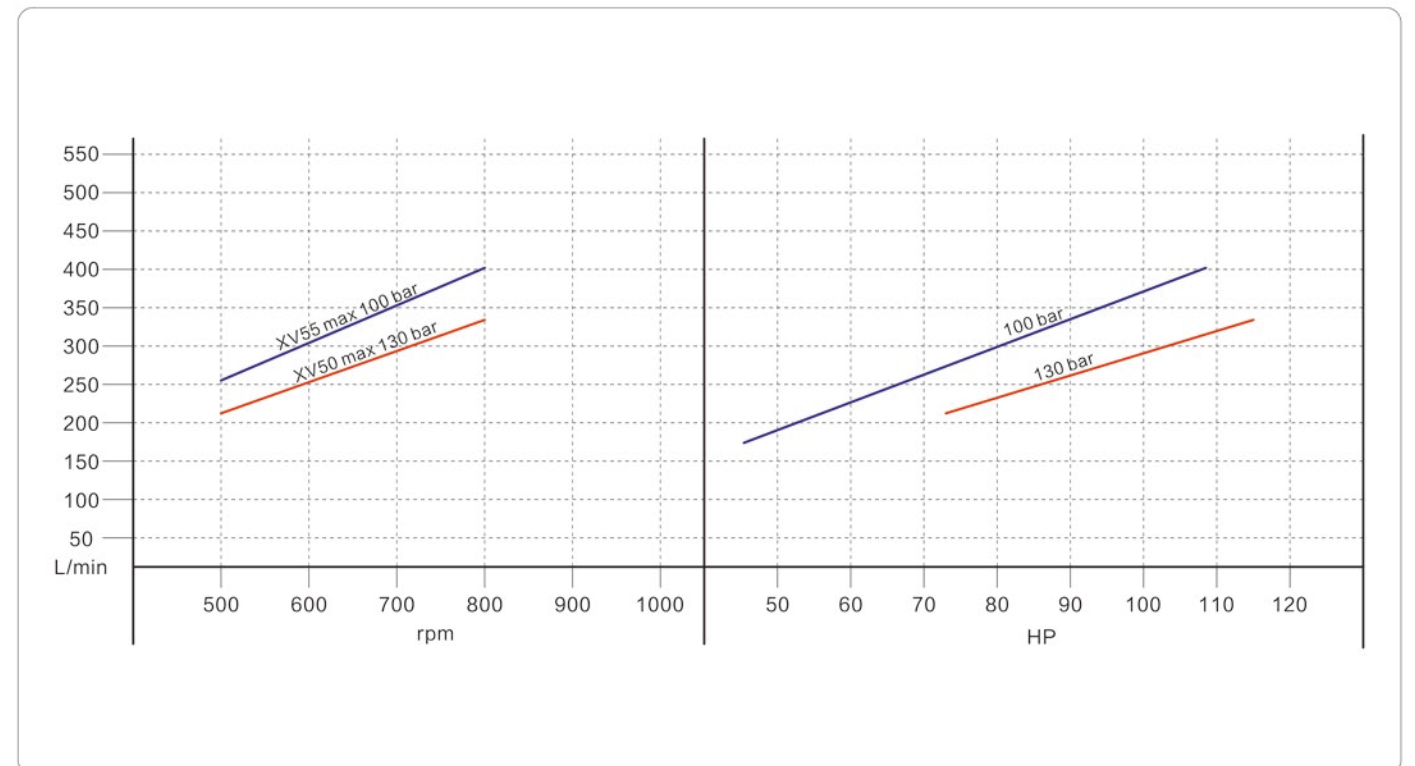
- Rated Pressure : 200 Bar
- Max Flow: 200 L/min
- Port Sizes: 1"
- Weight: 3.58 KG

(b) Safety Valve

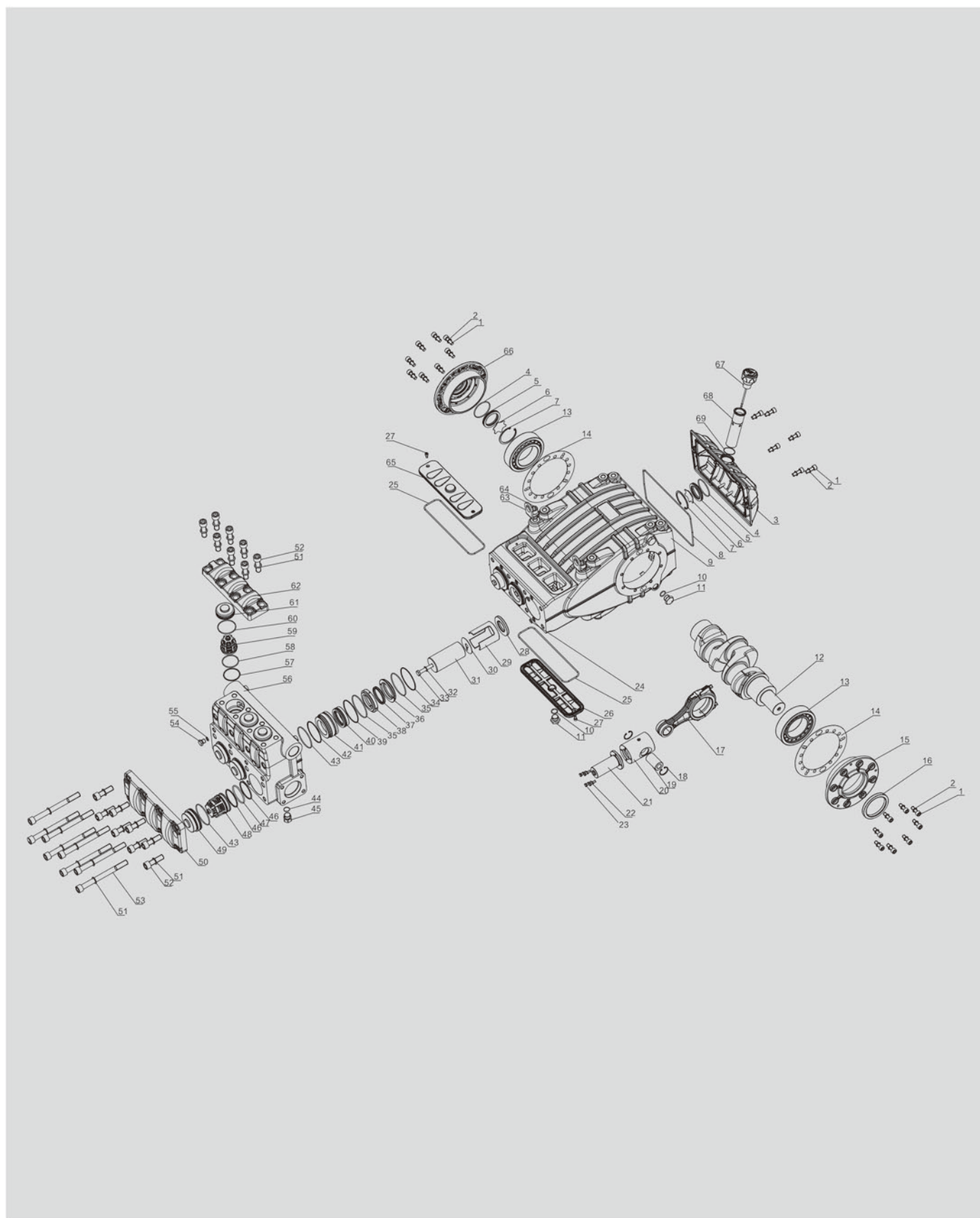
- Max Pressure : 250 Bar
- Max Flow: 200 L/min
- Inlet Port Sizes: 3/4"; Outlet Size: 1/2"
- Weight: 0.85 KG



Model	Flow Rate		Pressure			Speed	Power		Weight
	L/min	gpm	bar	p.s.i	Mpa	r.p.m	hp	kw	kg
XV50	330	87.2	130	1885	13	800	114	84	
XV55	399	105.4	100	1450	10	800	108	79	



XV55 SPARE PARTS



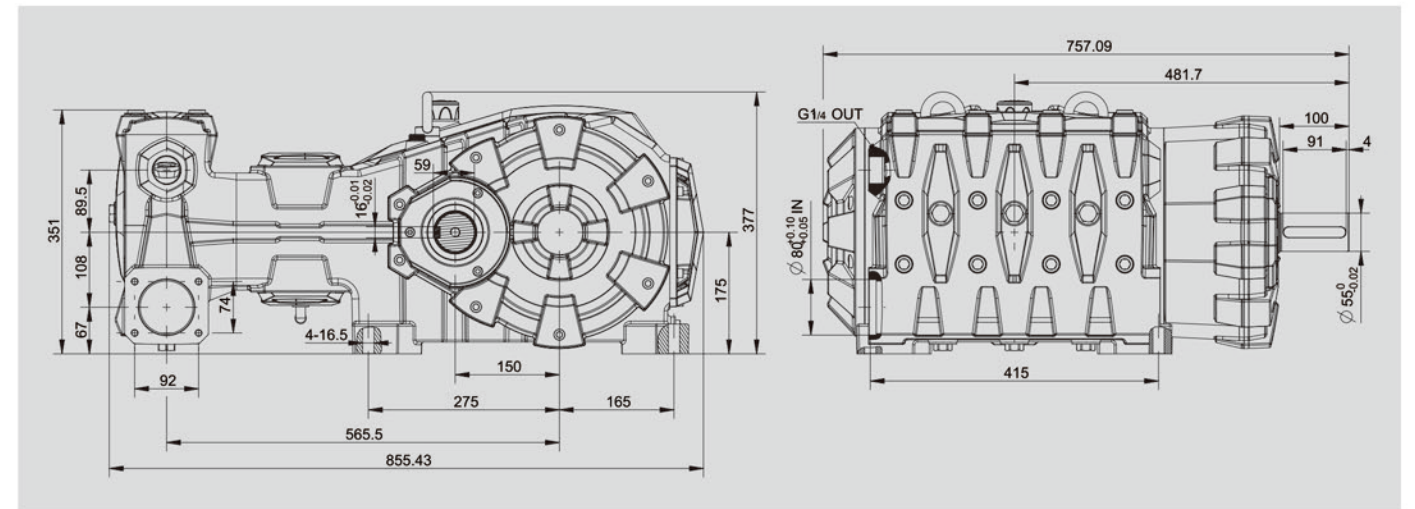
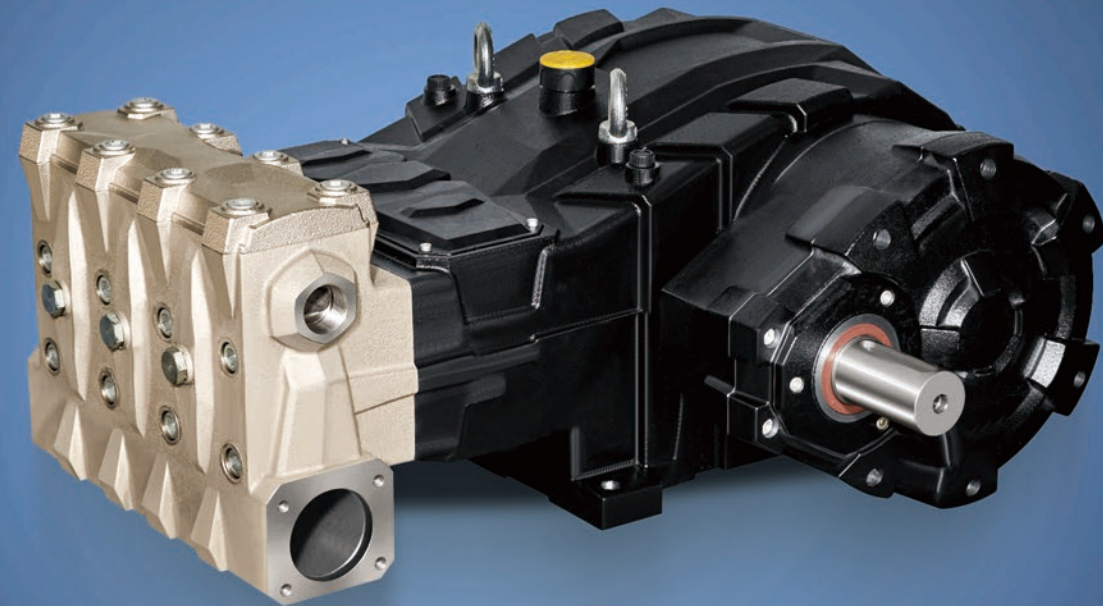
XV55 DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201032	Screw	22	37	590105013	50 Aux. Water Seal	3
2	590204101	Gasket	22	38	501901160	XW50 Support Ring	3
3	501902680	XW Rear Cover	1	39	590103012	Washer	3
4	590101098	O-ring	2	40	590104020	50 Main Water Seal Set	3
5	501902820	XW Oil Level	2	41	501901230	XW50 Main Water Seal Bushing	3
6	501902830	XW Oil Indicator	2	42	590103014	Washer	3
7	590205009	Washer	2	43	590101108	O-ring	6
8	590101062	O-ring	1	44	590101034	O-ring	6
9	501902720	XW Crankcase	1	45	500010017	XW Plug	6
10	590101036	O-ring	3	46	590102014	Washer	6
11	500010005	Plug	3	47	590101096	O-ring	3
12	502002010	XV Crankshaft	1	48	301191903	XW55 Suction Valve	3
13	590304001	Bearing	2	49	501901450	XW55 Suction Valve Plug	3
14	501902700	XW Seal Gasket	2	50	501901390	XW55 Suction Valve Cover	1
15	502002020	XV Connect Flange	1	51	590204109	Gasket	24
16	590108011	TC Crankshaft Oil Seal	1	52	590201036	Screw	16
17	301051901	XW Connecting Rod	3	53	590201019	Screw	8
18	590205010	Washer	6	54	500010018	XW Plug	3
19	501902790	XW Plunger Pin	3	55	590101004	O-ring	3
20	501902690	XW Piston	3	56	501901030	XW55 Cylinder Head	1
21	501902780	XW Plunger Rod	3	57	590102012	Washer	3
22	590204102	Gasket	12	58	590101088	O-ring	3
23	590201010	Bolt	12	59	301191901	XW40 Delivery Valve	3
24	590101178	O-ring	6	60	590101094	O-ring	3
25	590101056	O-ring	2	61	501901460	XW55 Delivery Valve Plug	3
26	501902740	XW Bottom Cover	1	62	501901400	XW55 Delivery Valve Cover	1
27	590201014	Screw	4	63	501902670	XW Lift Ring	2
28	590107008	TC4 Plunger Oil Seal	3	64	590201018	Screw	2
29	501902760	XW Support	3	65	501902740	XW Top Cover	1
30	501902660	XW Washer	3	66	501902810	XW Side Cover	1
31	501902520	XW50 Ceramic Plunger	3	67	301151901	XW Dipstick	1
32	501902800	XW Washer	3	68	501902840	XW Dipstick Bushing	1
33	501902750	XW Plunger Lock Bolt	3	69	590101076	O-ring	1
34	590102011	Washer	3				
35	590101112	O-ring	6				
36	501901090	XW50 Rear Guide Ring	3				

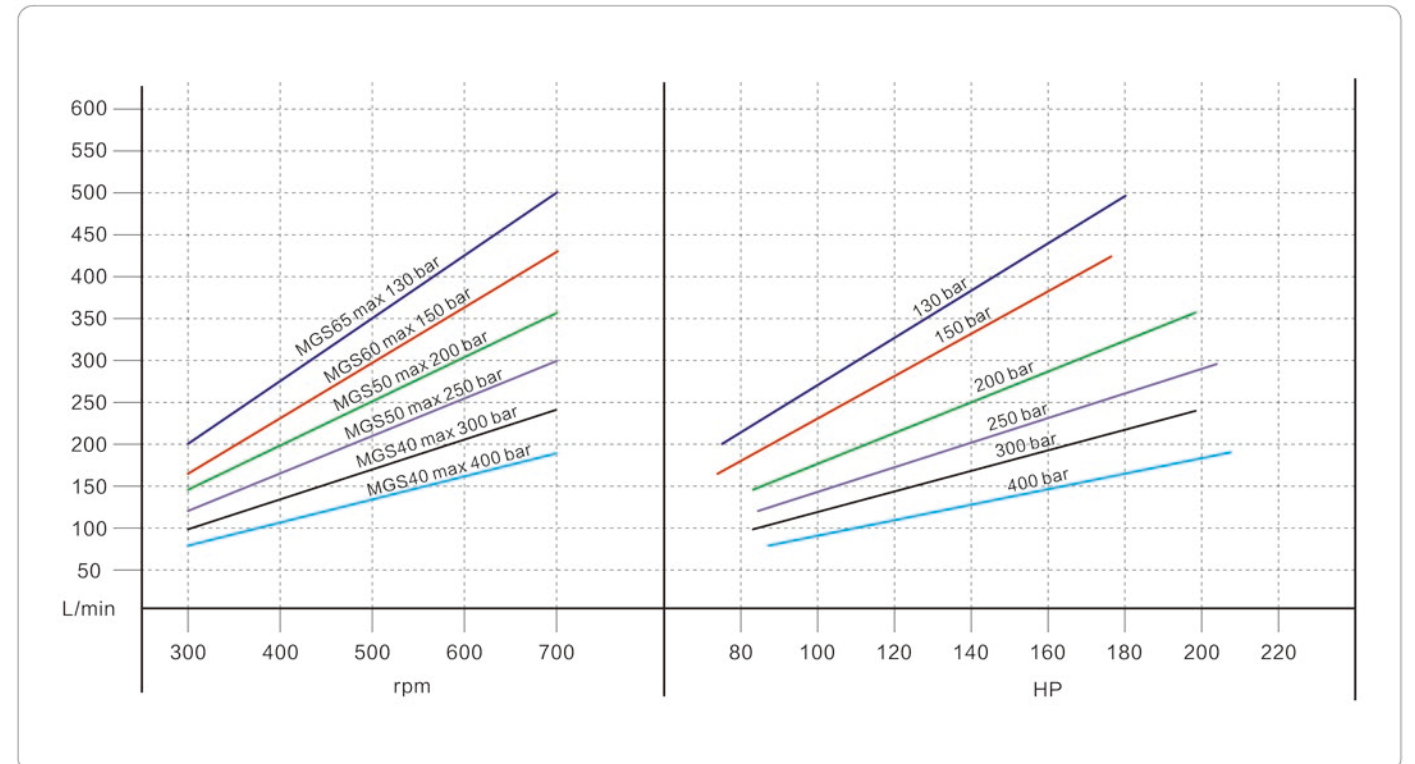
MGS SERIES

FEATURES

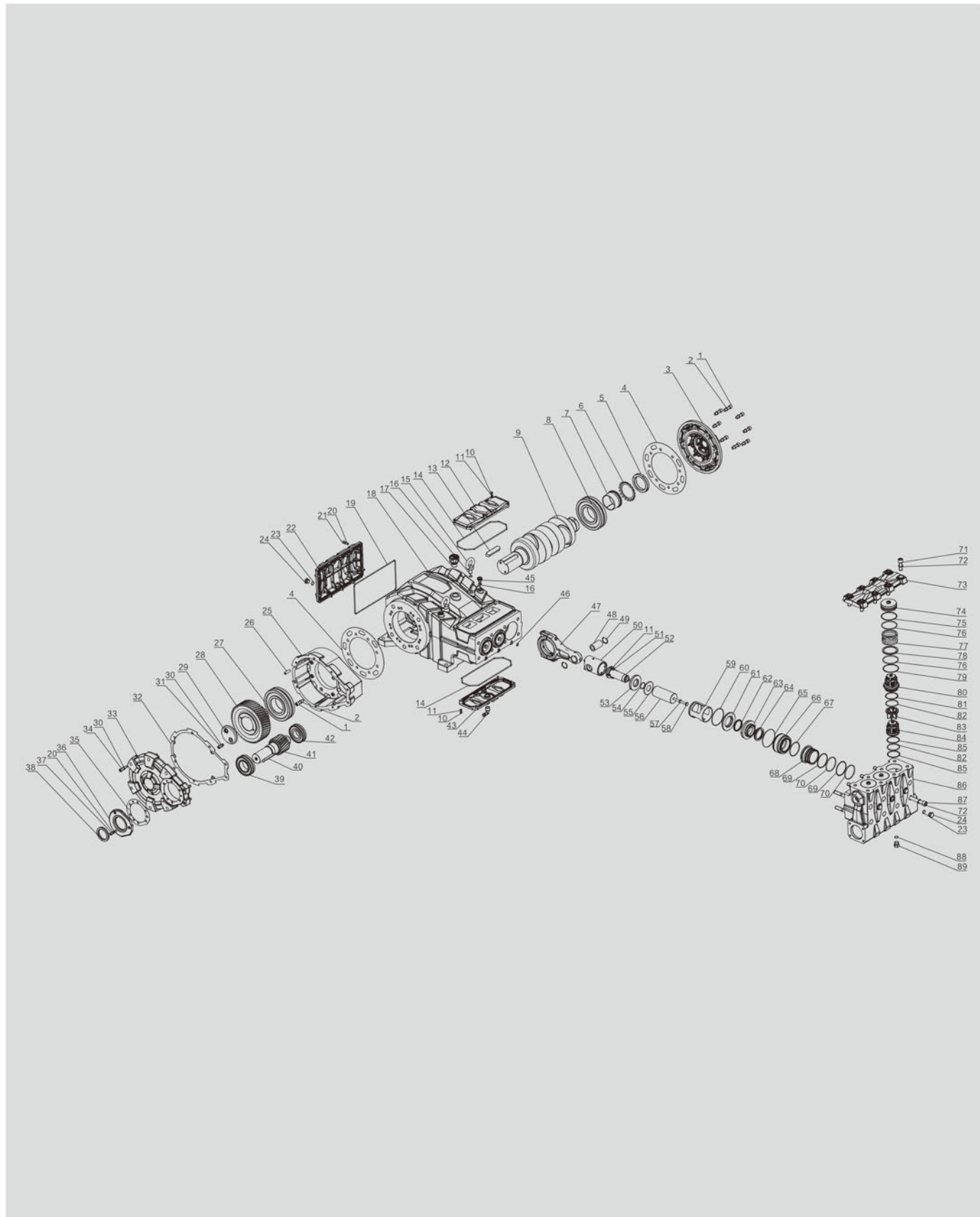
- Forged Manifold, Spherical Cast Iron, Nickel Treatment
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- External Gearbox
- Drain Valve



Model	Flow Rate		Pressure			Speed (r.p.m)			Power		Weight kg
	L/min	gpm	bar	p.s.i	Mpa	1:2.22	1:2.65	1:3.29	hp	kw	
MGS40	183	48.4	400	5800	40	1500/1800/2200			190	140	480
MGS45	232	61.3	300	4350	30	1500/1800/2200			181	133	480
MGS50	287	75.8	250	3625	25	1500/1800/2200			186	137	480
MGS55	347	91.7	200	2900	20	1500/1800/2200			180	132.5	480
MGS60	413	109.4	170	2465	17	1500/1800/2200			182	134	480
MGS65	485	128.0	150	2175	15	1500/1800/2200			189	139	480



MGS SPARE PARTS



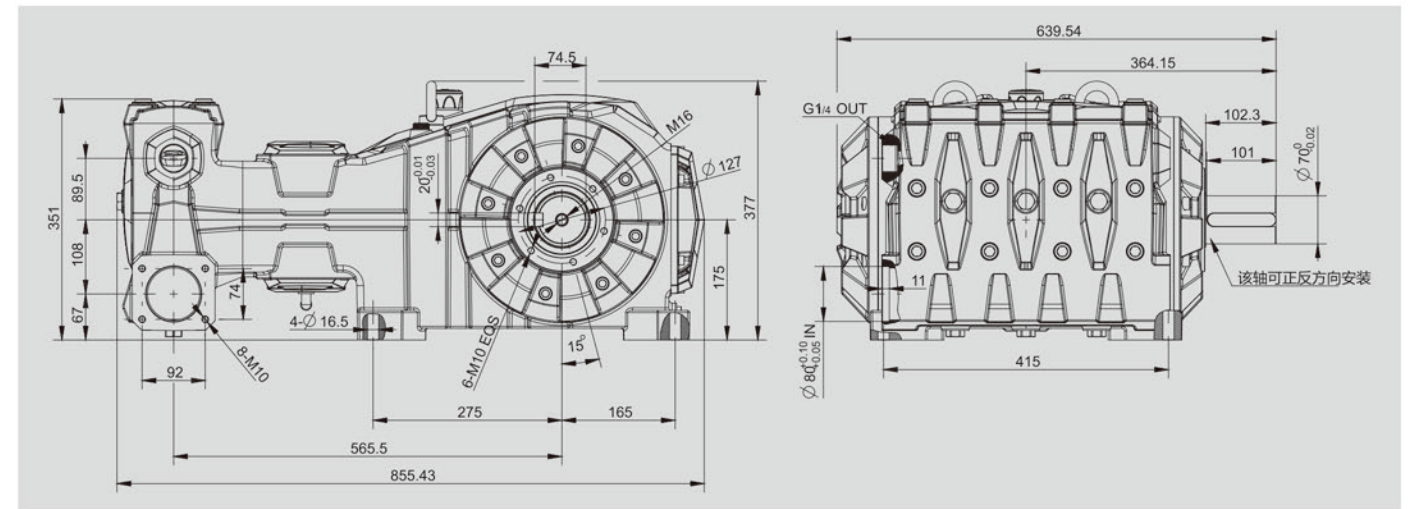
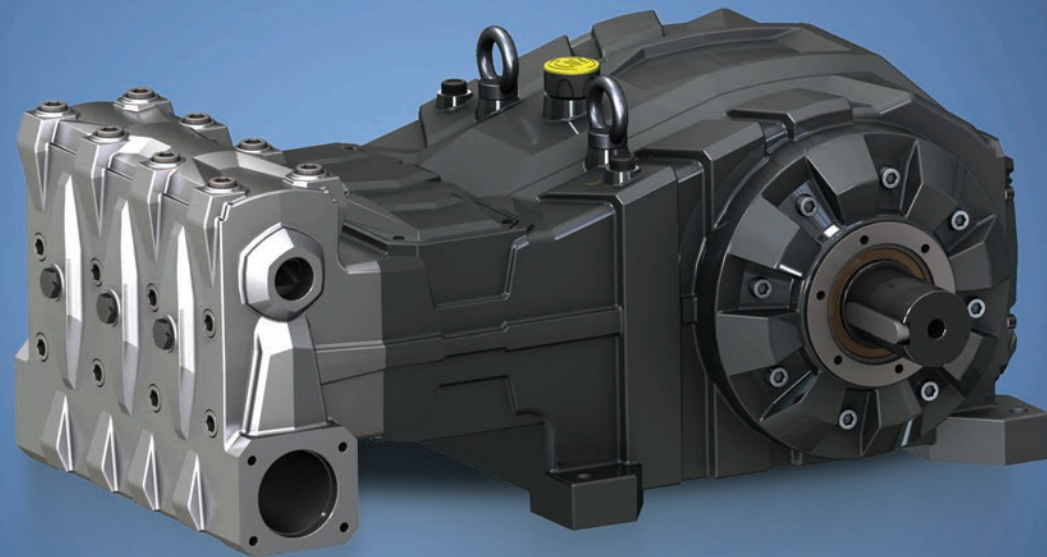
MGS DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590202017	Screw	16	47	301054001	MGS Connecting Rod	3
2	590204104	Gasket	16	48	503901130	MGS Plunger Pin	3
3	503901030	MGS Left Cover	1	49	590205003	Washer	6
4	503901040	MGS Side Cover Seal	2	50	503901150	MGS Plunger Guide	3
5	503901050	MGS Quit Sleeve Lock Nut	1	51	590201010	Screw	12
6	503901060	MGS Quit Sleeve Washer	1	52	503901140	MGS Plunger Rod	3
7	503901070	AHX317 Quit Sleeve	1	53	590107010	TC4 Plunger Oil Seal	3
8	590305002	Bearing	1	54	590101066	O-ring	3
9	503901010	MGS Crankshaft	1	55	503901160	MGS Washer	3
10	590201012	Screw	8	56	503901170	MGS55 Ceramic Plunger	3
11	590204102	Gasket	20	57	501902800	XW Washer	3
12	503901300	MGS Body Top Cover	1	58	503901180	MGS Plunger Lock Bolt	3
13	500011009	Flat Key	1	59	503901190	MGS Oil Seal Support	3
14	590101183	O-ring	2	60	590101185	O-ring	3
15	503901380	Lift Bolt	2	61	503901200	MGS55 Rear Guide Ring	3
16	590101019	O-ring	4	62	590105014	55 Aux. Water Seal	3
17	301151901	XW Oil Cap	1	63	503901210	MGS55 Support Ring	3
18	503901010	MGS Crankcase	1	64	590104021	55 Main Water Seal Set	3
19	590101184	O-ring	1	65	590101186	O-ring	3
20	590204103	Gasket	13	66	503901220	MGS55 Main Water Seal Bushing	3
21	590201003	Screw	10	67	590101187	O-ring	3
22	503201100	MGS Rear Cover	1	68	503901230	MGS55 Plunger Bushing	3
23	590101035	O-ring	4	69	590103023	Washer	6
24	500010005	Plug	4	70	590101188	O-ring	6
25	503901310	MGS Gearbox	1	71	590201052	Screw	8
26	503901390	MGS Set Pin	4	72	590204109	Gasket	16
27	590305003	Bearing	1	73	503901240	MGS Valve Cover	1
28	503901370	MGS Driven Gear	1	74	503901250	MGS Valve Plug	3
29	501902650	XW Driven Gear Plate	1	75	590103022	Washer	3
30	590204101	Gasket	10	76	590101189	O-ring	6
31	590201054	Screw	2	77	503901260	MGS Checking Valve Support Spring	3
32	503901330	MGS Gearbox Seal Gasket	1	78	503901270	MGS Checking Valve Support Block	3
33	503901320	MGS Gearbox Cover	1	79	590102018	Washer	3
34	590201055	Screw	8	80	301194001	MGS Delivery Valve	3
35	503901360	MGS Driving Gear Gasket	1	81	590103021	Washer	3
36	503901350	MGS Driving Gear Oil Seal Cover	1	82	590101096	O-ring	6
37	590201004	Screw	3	83	503901280	MGS Checking Valve Support	3
38	590108017	TC Crankshaft	1	84	301191903	XW55 Suction Valve	3
39	590305004	Bearing	1	85	590102014	Washer	6
40	500011010	Flat Key	1	86	503901290	MGS Cylinder Head	1
41	503901340	MGS Driving Gear	1	87	590201053	Screw	8
42	590305005	Bearing	1	88	590101034	O-ring	3
43	503901090	MGS Body Bottom Cover	1	89	500010017	XW Plug	3
44	503901110	MGS Drain Kit	1				
45	503901120	MGS Dipstick	2				
46	590101007	O-ring	3				

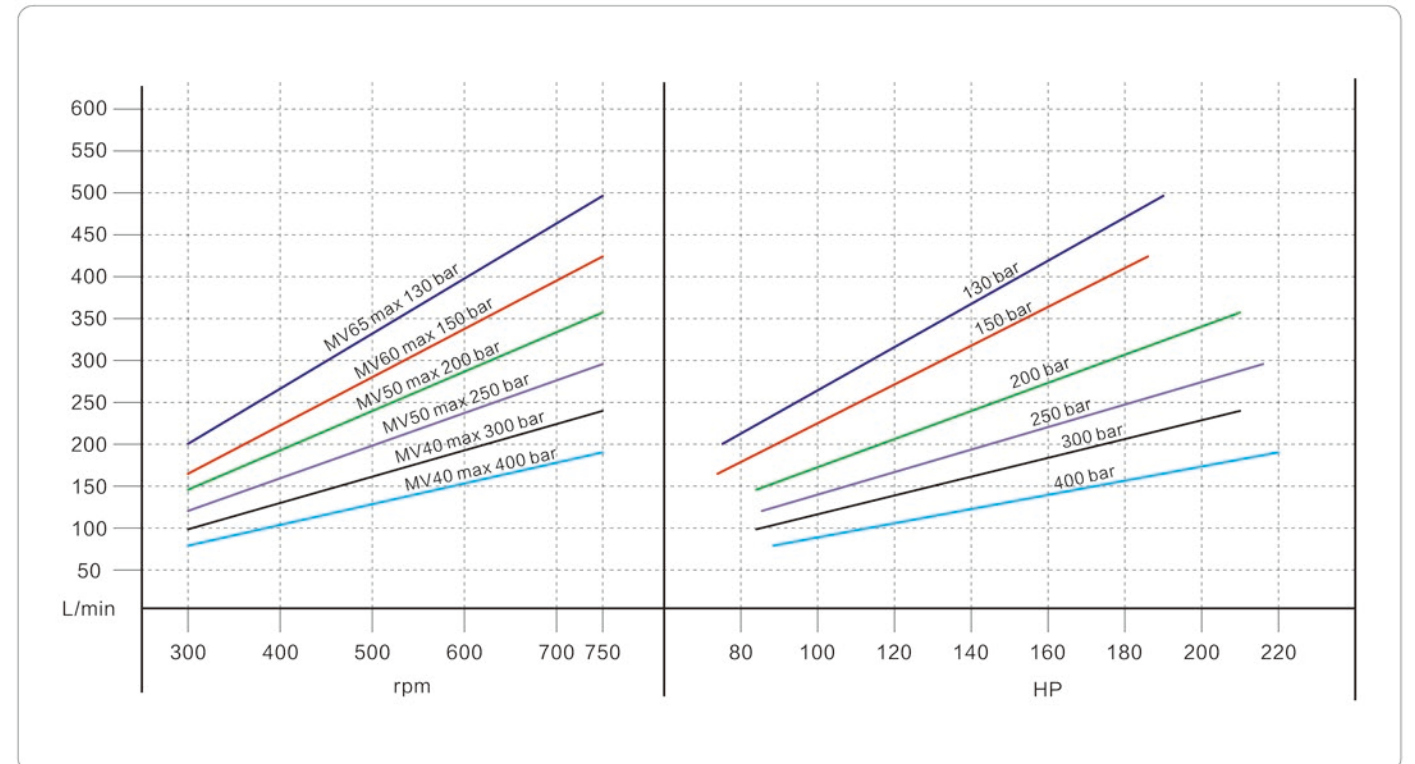
MV SERIES

FEATURES

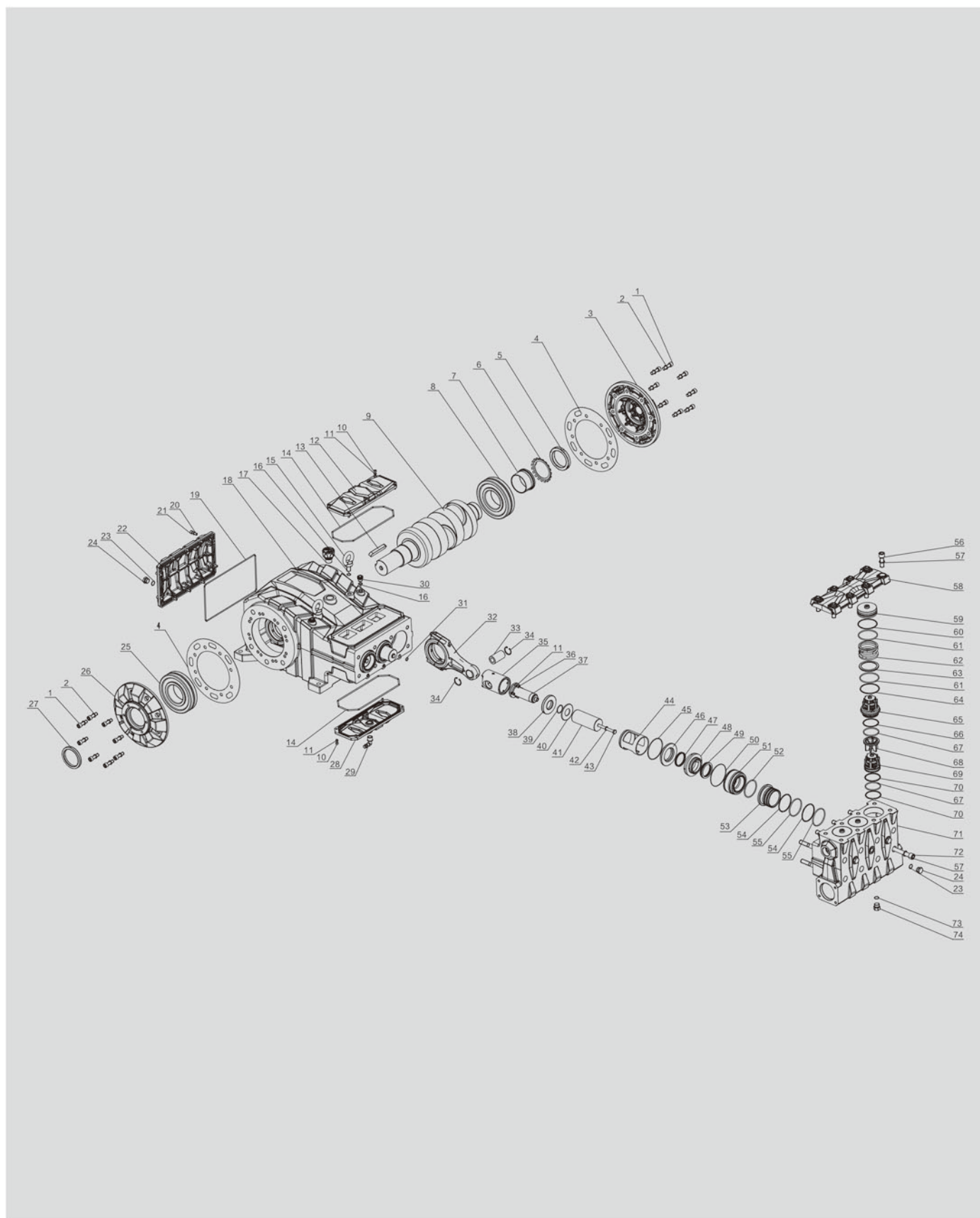
- Forged Manifold, Spherical Cast Iron, Nickel Treatment
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- Drain Valve



Model	Flow Rate		Pressure			Speed	Power		Weight
	L/min	gpm	bar	p.s.i	Mpa	r.p.m	hp	kw	kg
MV40	203	53.7	400	5800	40	750	217	160	420
MV45	257	67.9	300	4350	30	750	205	151	420
MV50	318	84	250	3625	25	750	212	156	420
MV55	385	102	200	2900	20	750	205	151	420
MV60	458	121	150	2175	15	750	182	134	420
MV65	537	141	130	1885	13	750	186	137	420



MV SPARE PARTS



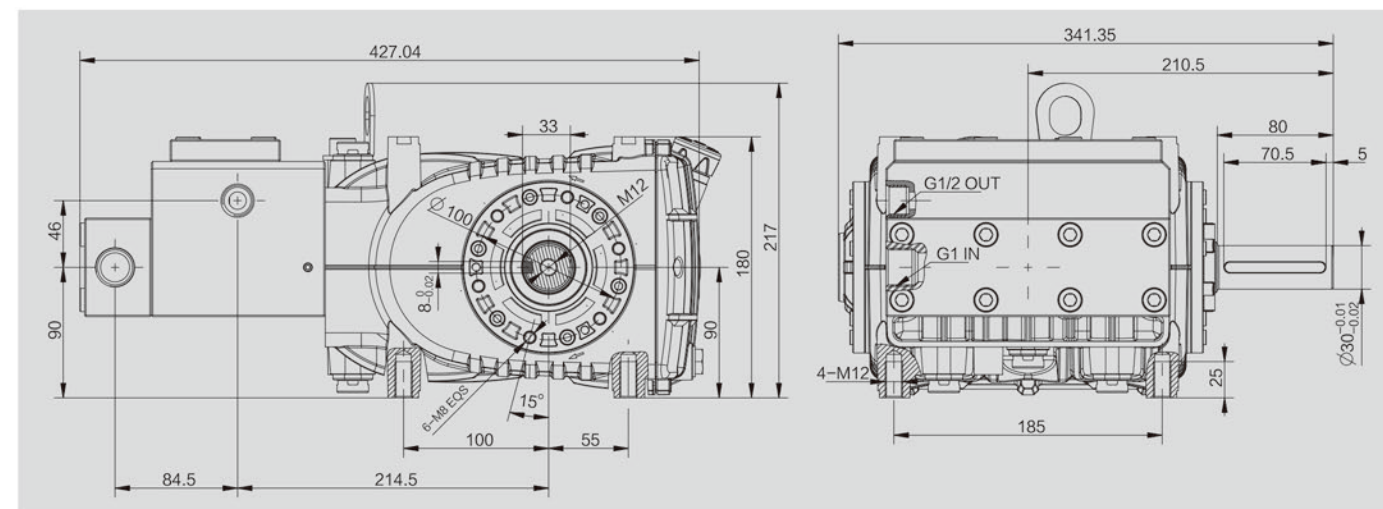
MV DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590202017	Screw	16	39	590101066	O-ring	3
2	590204104	Gasket	16	40	503901160	MGS Washer	3
3	503901030	MGS Left Cover	1	41	503901170	MGS55 Ceramic Plunger	3
4	503901040	MGS Side Cover Seal	2	42	501902800	XW Washer	3
5	503901050	MGS Lock Nut	1	43	503901180	MGS Plunger Lock Bolt	3
6	503901060	MGS Quit Sleeve Washer	1	44	503901190	MGS Oil Seal Support	3
7	503901070	AHX317 Quit Sleeve	1	45	590101185	O-ring	3
8	590305002	Bearing	1	46	503901200	MGS55 Rear Guide Ring	3
9	504001010	MV Crankshaft	1	47	590105014	55 Aux. Water Seal	3
10	590201012	Screw	8	48	503901210	MGS55 Support Ring	3
11	590204102	Gasket	20	49	590104021	55 Main Water Seal Set	3
12	503901300	MGS Body Top Cover	1	50	590101186	O-ring	3
13	503901080	Flat Key	1	51	503901220	MGS55 Main Water Seal Bushing	3
14	590101183	O-ring	2	52	590101187	O-ring	3
15	503901380	Lift Bolt	2	53	503901230	MGS55 Plunger Bushing	3
16	590101019	O-ring	4	54	590103023	Washer	6
17	301151901	XW Oil Cap	1	55	590101188	O-ring	6
18	503901010	MGS Crankcase	1	56	590201052	Screw	8
19	590101184	O-ring	1	57	590204109	Gasket	16
20	590204103	Gasket	10	58	503901240	MGS Valve Cover	1
21	590201003	Screw	10	59	503901250	MGS Valve Plug	3
22	503201100	MGS Rear Cover	1	60	590103022	Washer	3
23	590101035	O-ring	4	61	590101189	O-ring	6
24	500010005	Plug	4	62	503901260	MGS Checking Valve Support Spring	3
25	590305003	Bearing	1	63	503901270	MGS Checking Valve Support Block	3
26	504001020	MV Right Cover	1	64	590102018	Washer	3
27	590108011	TC Crankshaft Oil Seal	1	65	301194001	MGS Delivery Valve	3
28	503901090	MGS Body Bottom Cover	1	66	590103021	Washer	3
29	503901110	MGS Drain Kit	1	67	590101096	O-ring	6
30	503901120	MGS Dipstick	2	68	503901280	MGS Checking Valve Support	3
31	590101007	O-ring	3	69	301191903	XW55 Suction Valve	3
32	301054001	MGS Connecting Rod	3	70	590102014	Washer	6
33	503901130	MGS Plunger Pin	3	71	503901290	MGS Cylinder Head	1
34	590205003	Washer	6	72	590201053	Screw	8
35	503901150	MGS Plunger Guide	3	73	590101034	O-ring	3
36	590201010	Round Screw	12	74	500010017	XW Plug	3
37	503901140	MGS Plunger Rod	3				
38	590107010	TC4 Plunger Oil Seal	3				

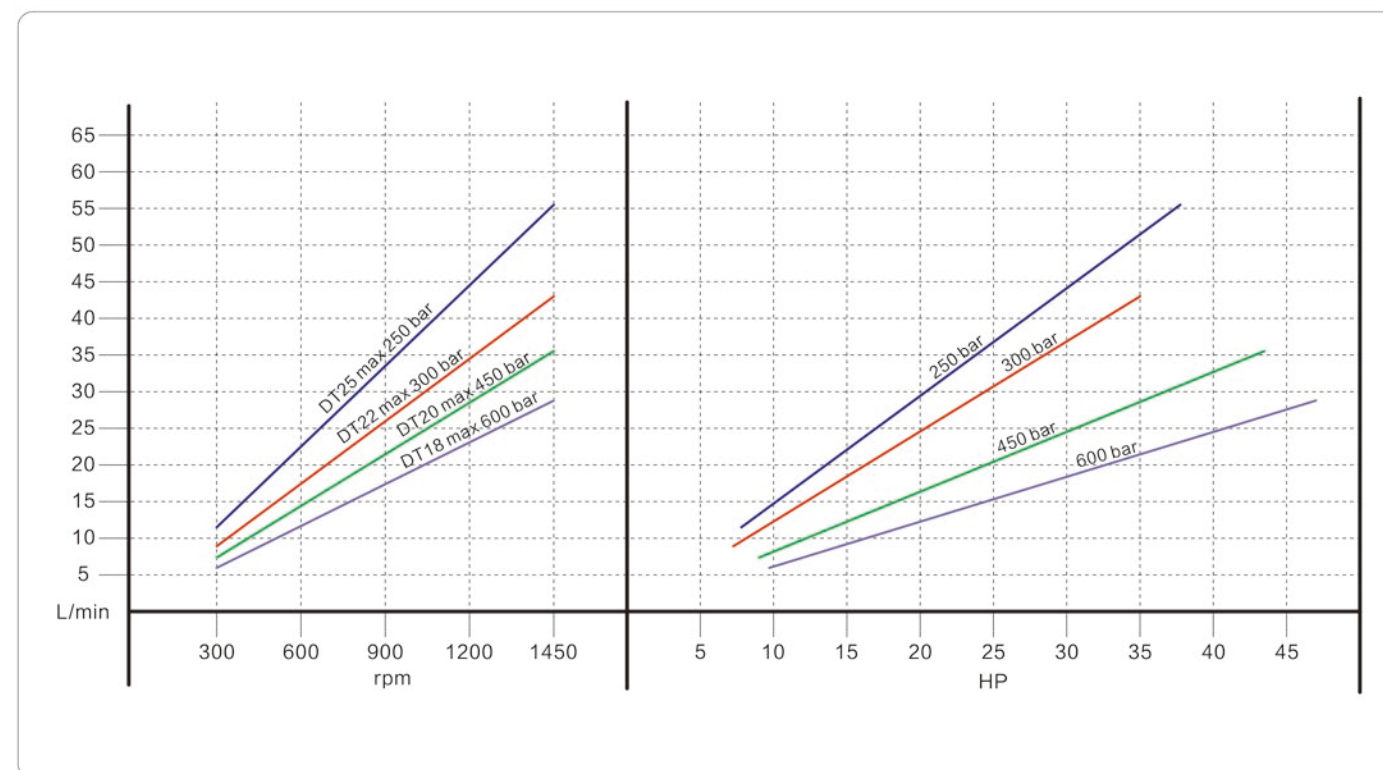
DT SERIES

FEATURES

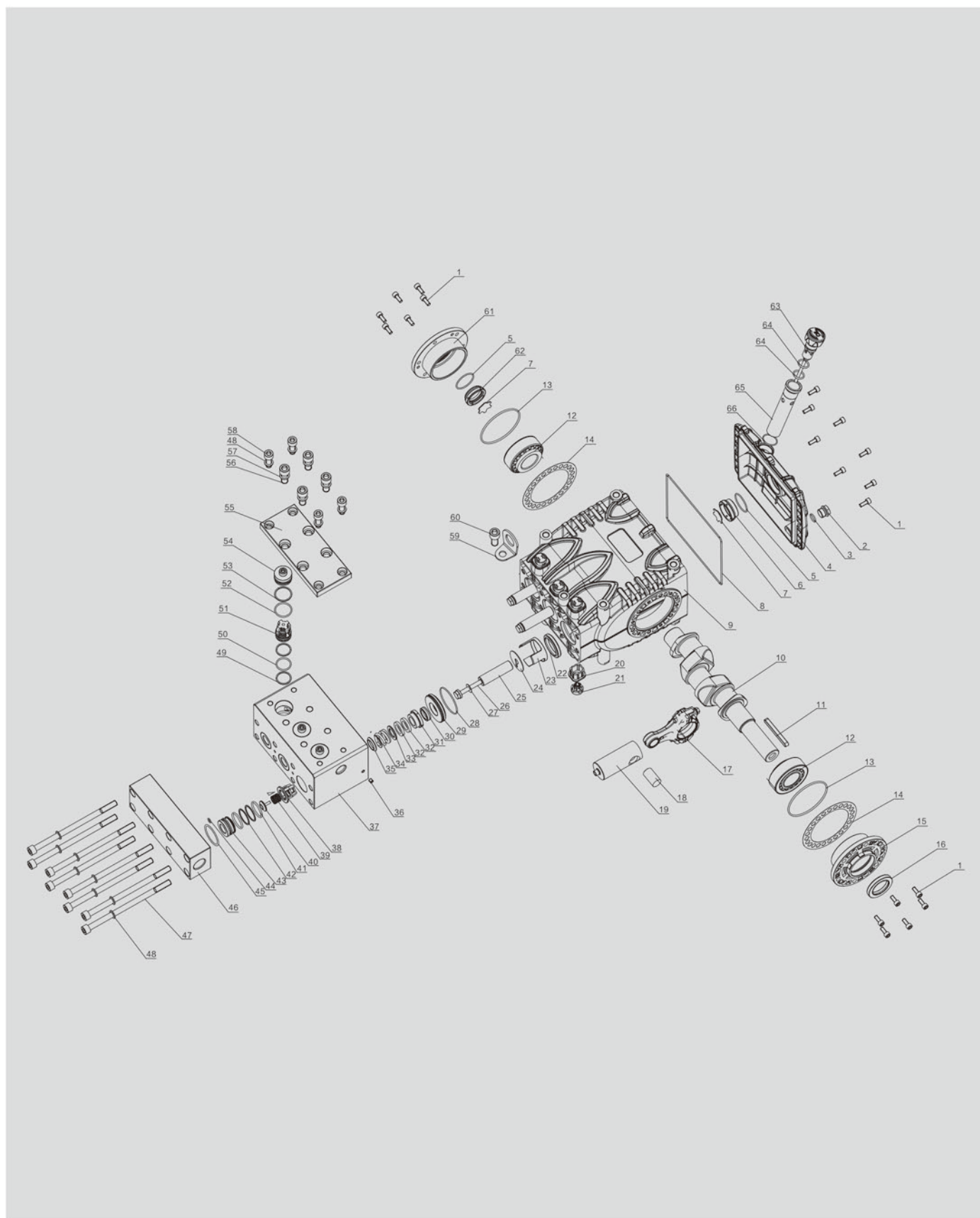
- Triplex Plunger Pump, available in 4 versions
- High Grade Stainless Steel Manifold
- High Resistant Alloy Crankcase
- Hardened Alloy Steel Crankshaft
- Light Alloy Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Checking Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication



Model	Flow Rate		Pressure			Speed r.p.m	Power		Weight kg
	L/min	gpm	bar	Mpa	p.s.i		hp	kw	
DT18	29	7.6	600	60	8700	1450	46	33.8	39
DT20	35.5	9.3	450	45	6525	1450	42.5	31.3	39
DT22	43	11.3	300	30	5800	1450	34.5	25.3	39
DT25	55.5	14.6	250	25	4060	1450	36.7	27	39



DT SPARE PARTS



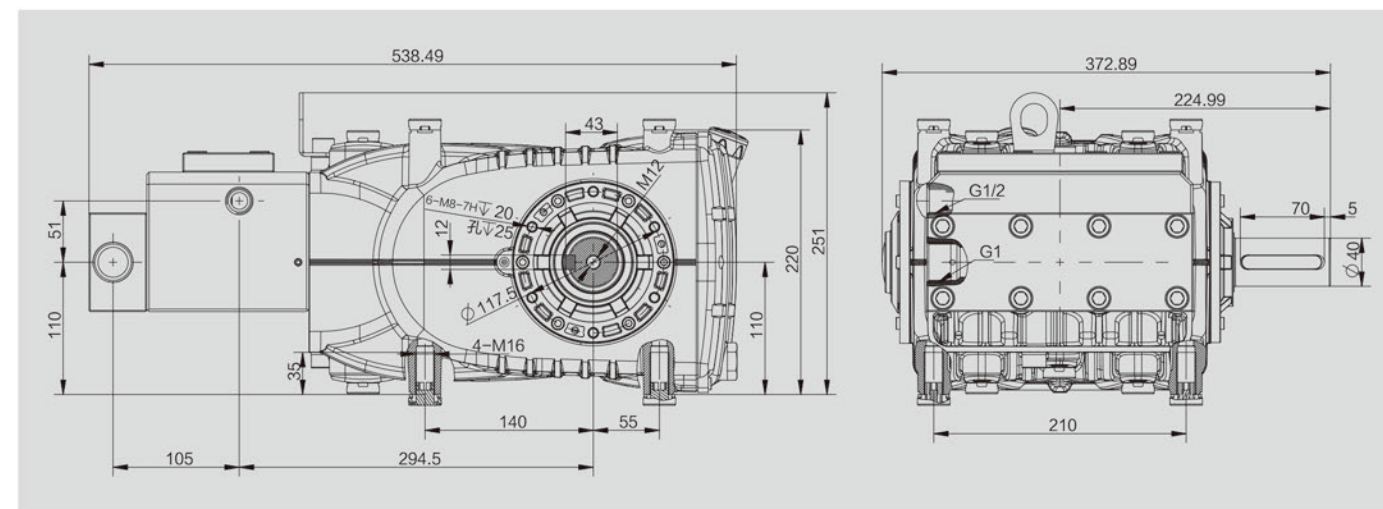
DT DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201012	Screw	20	34	501001260	DS2150 Main Water Seal Spring	3
2	500010002	Plug	1	35	501001250	DS2150 Water Seal Spring Seat	3
3	590101019	O-ring	1	36	590207101	Bolt	2
4	501502420	PT Rear Cover	1	37	502201010	DT18 Cylinder Head	1
5	590101075	O-ring	2	38	502102180	DF18 Suction Valve Cover	3
6	501201320	PF Side Oil Level	1	39	502102170	DF Suction Valve Spring	3
7	501201330	PF Side Oil Indicator	2	40	502102200	DF18 Suction Valve Spool	3
8	590101048	O-ring	1	41	590101190	O-ring	3
9	501502220	PT Crankcase	1	42	590103017	Washer	6
10	501502210	PT Crankshaft	1	43	502102220	DF18 Suction Valve Seat	3
11	500011005	Flat Key	1	44	590101100	O-ring	2
12	590303006	Bearing	2	45	590101191	O-ring	3
13	590101112	O-ring	2	46	502201050	DT Suction Valve Cover	1
14	501502340	PT Gasket	2	47	590201059	Screw	8
15	501502430	PT Connect Flange	1	48	590204101	Gasket	16
16	590108010	TC Crankshaft Oil Seal	1	49	590103018	Washer	6
17	301051501	PT Connecting Rod	3	50	590101192	O-ring	6
18	501502400	PT Plunger Pin	3	51	301192101	DF Delivery Valve	3
19	501502390	PT Plunger Rod	3	52	590101065	O-ring	3
20	101715020	PT Square Cap	6	53	590103019	Washer	3
21	101715030	PT Round Cap	6	54	502102260	DF Valve Plug	3
22	590107006	TC4 Plunger Oil Seal	3	55	502201060	DT Delivery Valve Cover	1
23	501502350	PT Support	3	56	590201059	Round Screw	4
24	501201340	PF Washer	3	57	590204104	Gasket	4
25	502201020	DT18 Ceramic Plunger	3	58	590201032	Round Screw	8
26	501502330	PT Plunger Lock Bolt	3	59	501201350	PF Lift Ring	1
27	501201460	PF Washer	3	60	590201024	Round Screw	1
28	590101089	O-ring	3	61	501502410	PT Side Cover	1
29	502201030	DT18 Rear Guide Ring	3	62	501002130	DS Side Oil Level	1
30	590105018	DF18 Aux. Water Seal	3	63	301151201	PF Dipstick	1
31	502201040	DT18 Support Ring	3	64	590101036	O-ring	2
32	590104029	DS2150 Main Water Seal	6	65	501502440	PT Dipstick Bushing	1
33	501001270	DS2150 Main Water Seal Gasket	3	66	590101061	O-ring	1

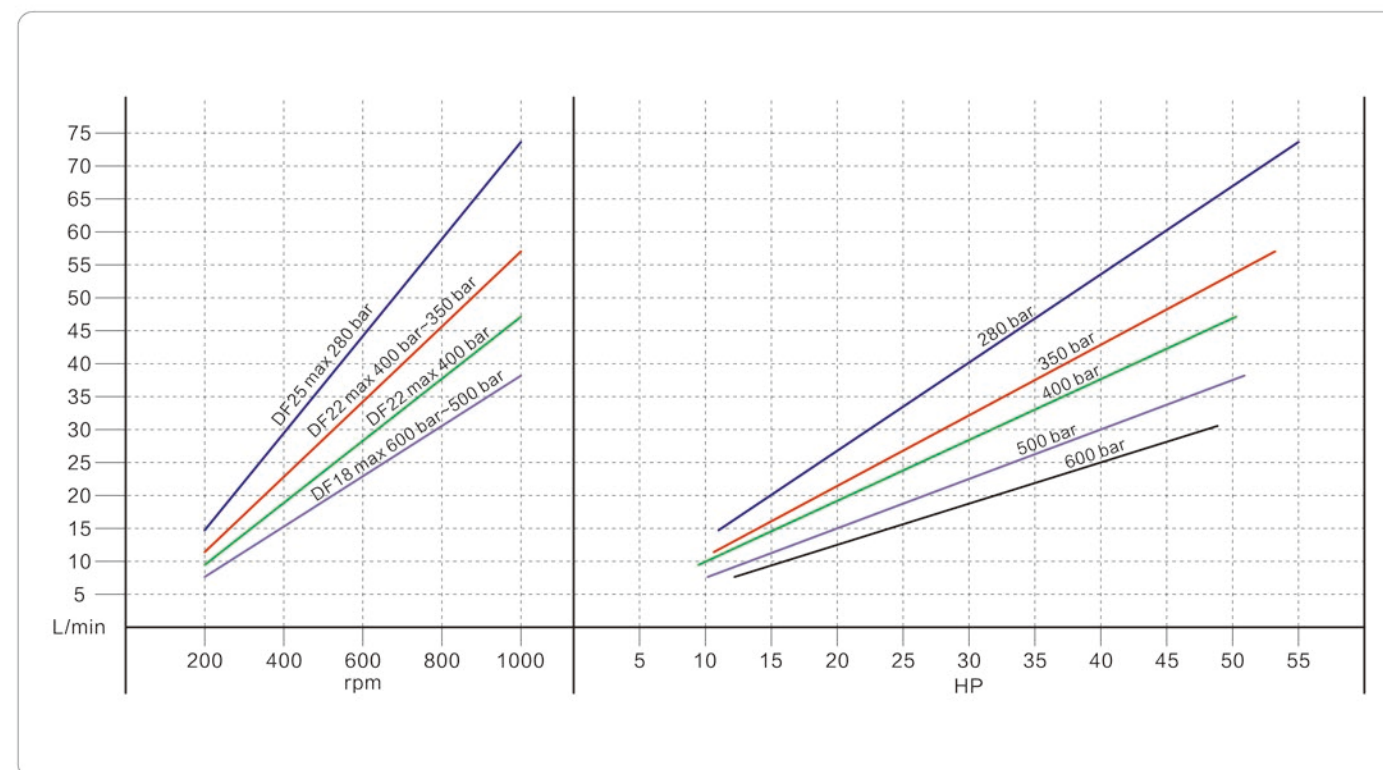
DF SERIES

FEATURES

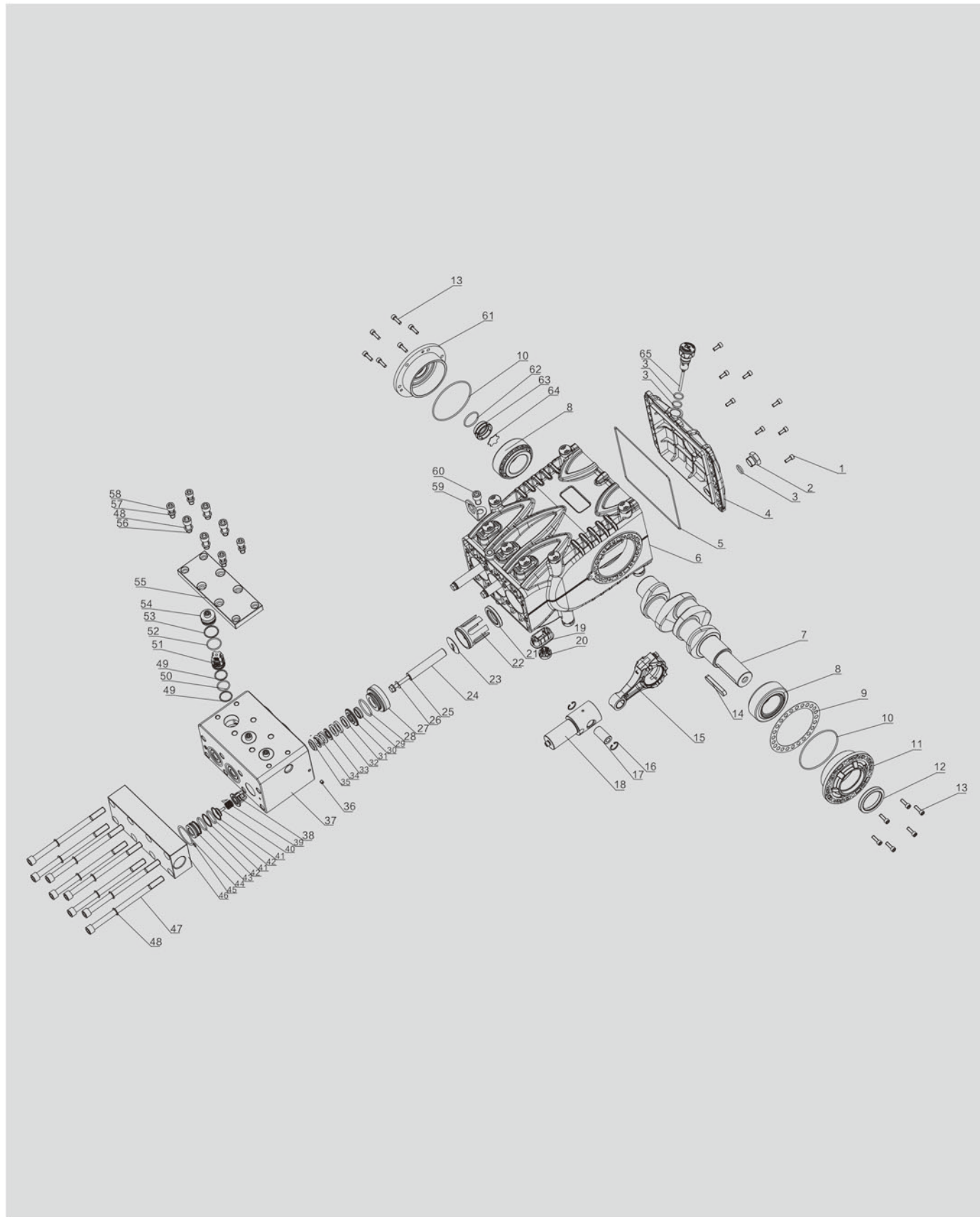
- High Grade Stainless Steel Manifold
- High Resistant Alloy Crankcase
- Hardened Alloy Steel Crankshaft
- Light Alloy Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Checking Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication



Model	Flow Rate		Pressure			Speed	Power		Weight
	L/min	gpm	bar	p.s.i	Mpa	r.p.m	hp	kw	kg
DF18	30	8.1	600	8700	60	800	48	35.5	62.5
	38	10.1	500	7250	50	1000	50	36.8	62.5
DF20	47	12.4	400	5800	40	1000	50	36.8	62.5
DF22	45	12.0	400	5800	40	800	48	35.5	62.5
	57	15.0	350	5075	35	1000	50	36.8	62.5
DF25	73	19.3	280	4060	28	1000	50	36.8	62.5



DF SPARE PARTS



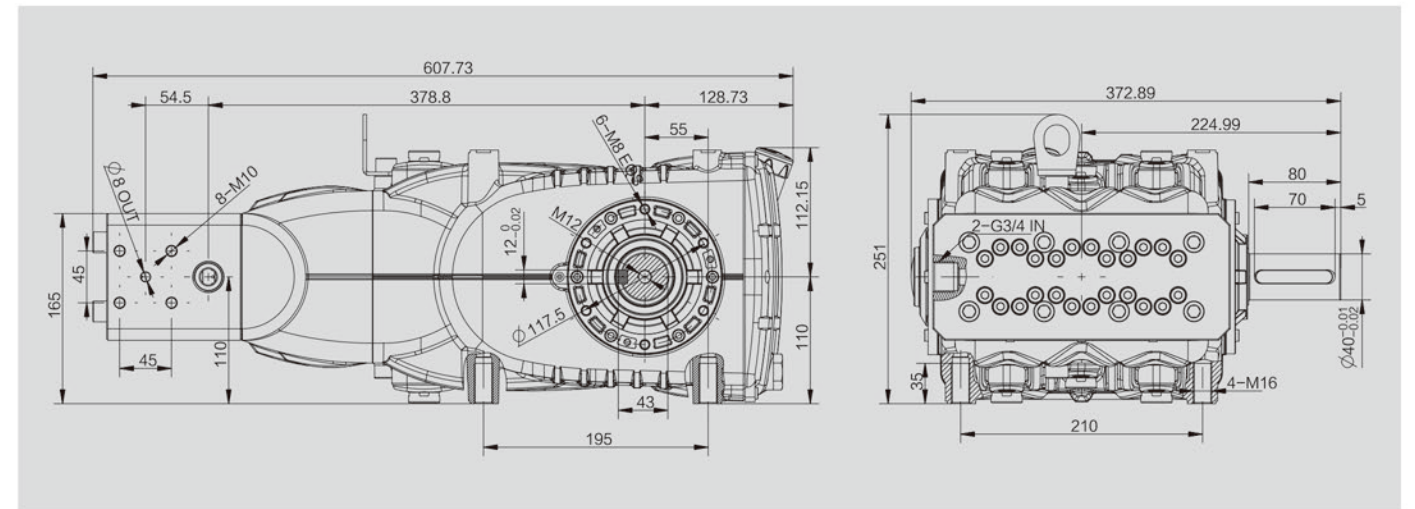
DF DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201012	Screw	8	34	501001260	DS2150 Main Water Seal Spring	3
2	500010005	Plug	1	35	501001250	DS2150 Water Seal Spring Seat	3
3	590101036	O-ring	3	36	590207101	Bolt	2
4	501201370	PF Rear Cover	1	37	502102130	DF18 Cylinder Head	1
5	590101057	O-ring	1	38	502102180	DF18 Suction Valve Cover	3
6	501201410	PF Crankcase	1	39	502102170	DF Suction Valve Spring	3
7	501201400	PF Crankshaft	1	40	502102200	DF18 Suction Valve Block	3
8	590303005	Bearing	2	41	590103017	Washer	6
9	501201420	PF Gasket	2	42	590101066	O-ring	6
10	590101117	O-ring	2	43	502102220	DF18 Suction Valve Seat	3
11	501201380	PF Connect Flange	1	44	590101084	O-ring	3
12	590108009	TC Crankshaft Oil Seal	1	45	590101100	O-ring	2
13	590201010	Screw	12	46	502102240	DF Suction Valve Cover	1
14	500011004	Flat Key	1	47	590201048	Screw	8
15	301051201	PF Connecting Rod	3	48	590204104	Gasket	8
16	590205008	Washer	6	49	590103018	Washer	6
17	501201450	PF Plunger Pin	3	50	590101060	O-ring	3
18	501201440	PF Plunger Rod	3	51	301192101	DF Delivery Valve	3
19	101712020	PF Square Cap	6	52	590101065	O-ring	3
20	101712030	PF Round Cap	6	53	590103019	Washer	3
21	590107006	TC4 Plunger Oil Seal	3	54	502102260	DF Valve Plug	3
22	501201430	PF Support	3	55	502102250	DF Delivery Valve Cover	1
23	501201340	PF Washer	3	56	590201059	Screw	4
24	502102010	DF18 Ceramic Plunger	3	57	590204101	Gasket	8
25	501201310	PF Plunger Lock Bolt	3	58	590201049	Screw	8
26	501201460	PF Washer	3	59	501201350	PF Lift Ring	1
27	502102050	DF18 Rear Guide Ring	3	60	590201026	Screw	1
28	590101176	O-ring	3	61	501201390	PF Side Cover	1
29	590105018	DF18 Aux. Water Seal	3	62	590101075	O-ring	1
30	502102090	DF18 Support Ring	3	63	501201320	PF Side Oil Level	1
31	502102160	DF18 Main Water Seal Ring	3	64	501201330	PF Side Oil Indicator	1
32	590104029	DS2150 Main Water Seal	6	65	301151201	PF Dipstick	1
33	501001270	DS2150 Main Water Seal Gasket	3				

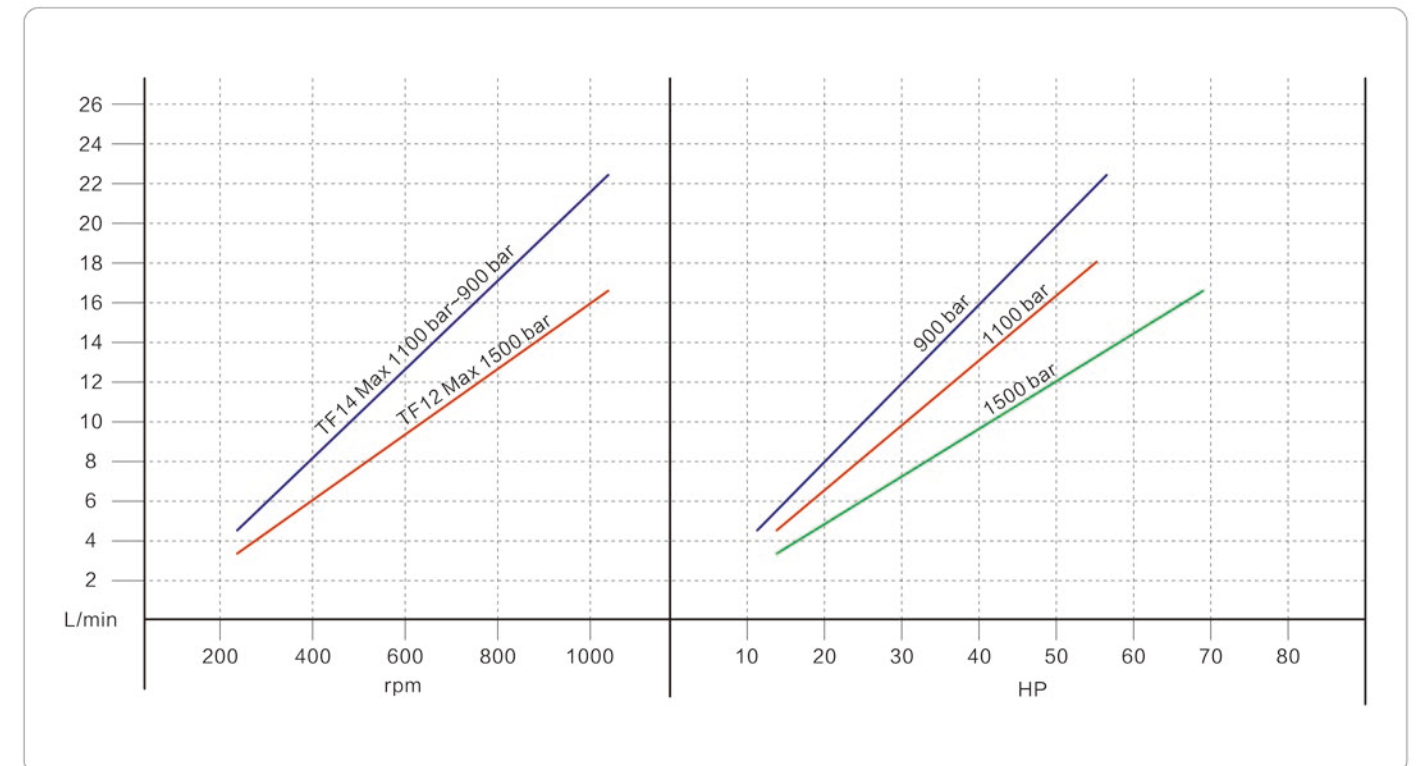
TF SERIES

FEATURES

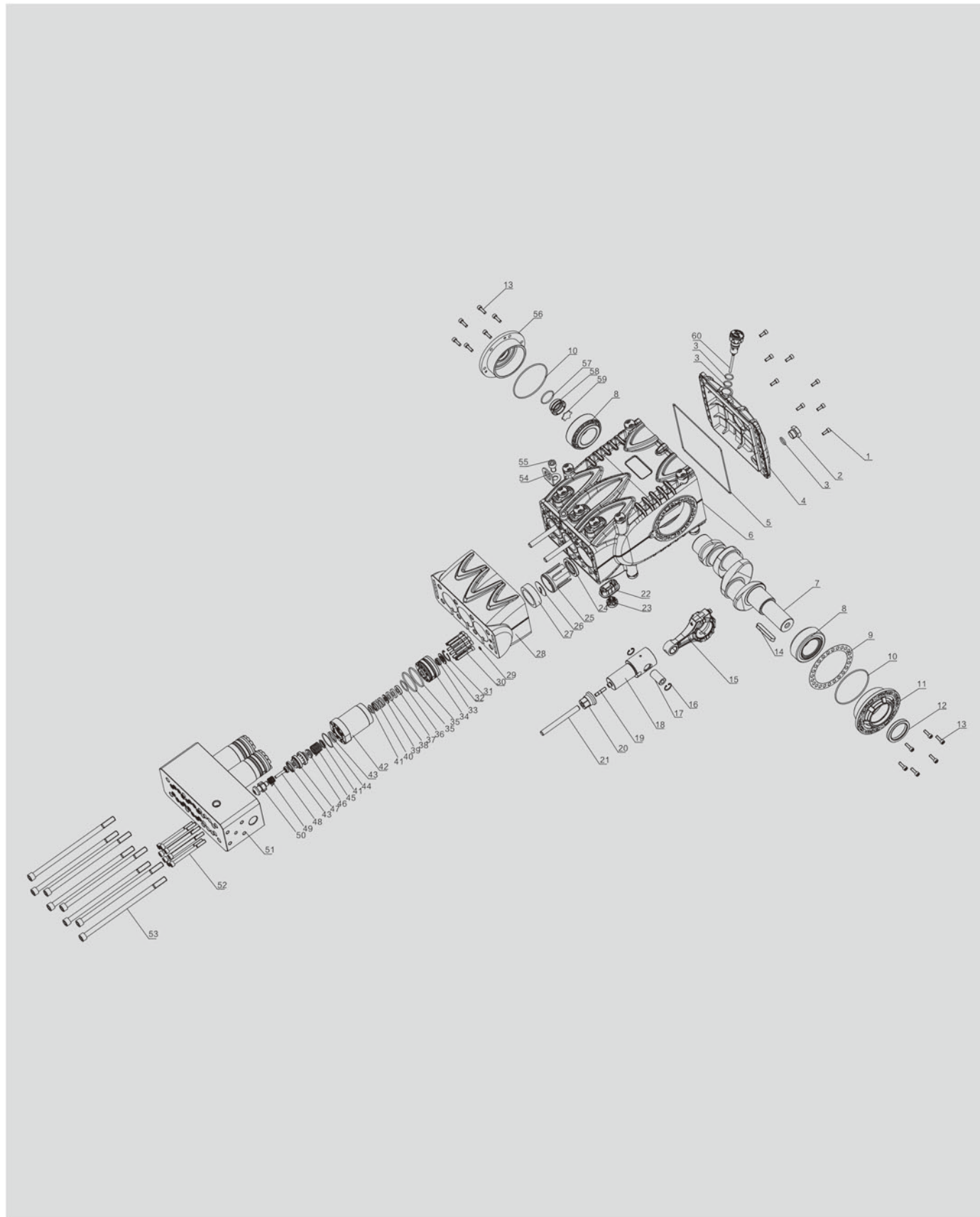
- Triplex Plunger Pump, available in 2 versions
- Pressure Packing Integrated cooling system
- Coaxial Suction/ Delivery valves
- Splash Lubrication



Model	Flow Rate		Pressure			Speed	Power		Weight
	L/min	gpm	bar	Mpa	p.s.i	r.p.m	hp	kw	kg
TF12	13.5	3.6	1500	150	21750	800	55	40	65.5
	17	4.5	1500	150	21750	1000	69	50	65.5
TF14	18.5	4.9	1100	110	16000	800	54	40	65.5
	23	6.0	900	90	13000	1000	54	40	65.5



TF SPARE PARTS



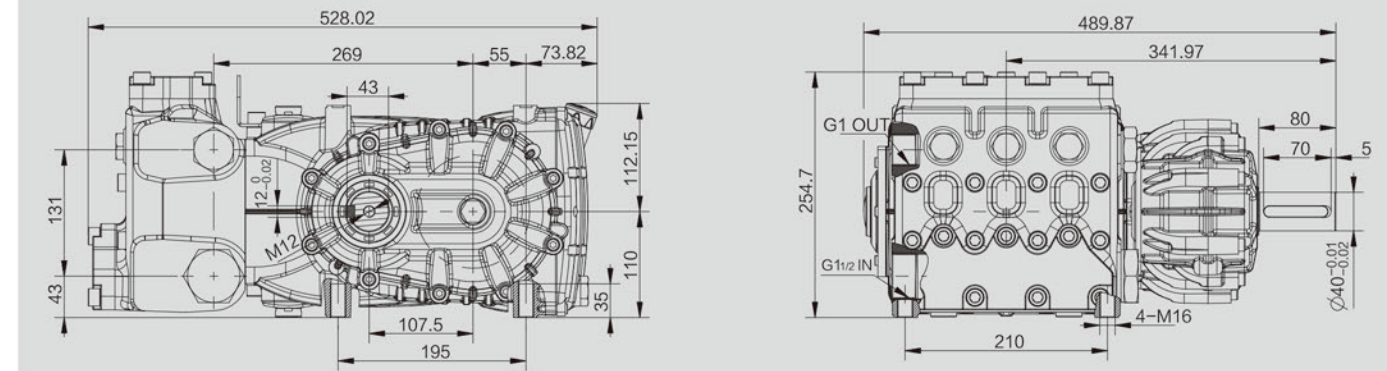
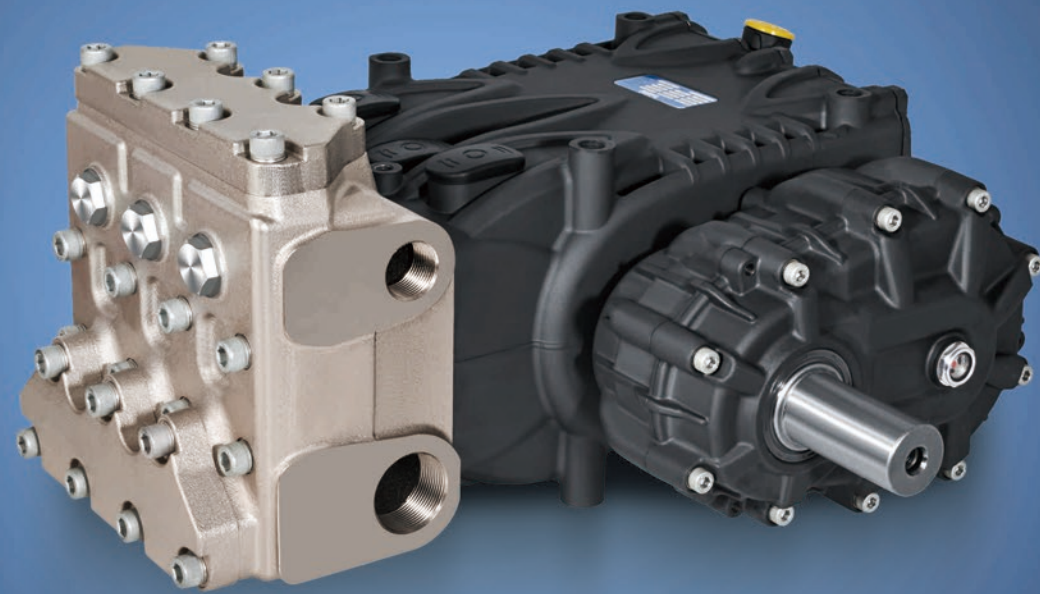
TF DETAILED LIST

No.	Article No.	Description	Q'ty	No.	Article No.	Description	Q'ty
1	590201012	Screw	8	33	590104035	S8 Water Seal 12	3
2	500010005	Plug	1	34	504101200	TF12 Aux. Water Seal Bush	3
3	590101036	O-ring	3	35	590101088	O-ring	6
4	501201370	PF Rear Cover	1	36	590101065	O-ring	3
5	590101057	O-ring	1	37	504101250	Tf12 Main Water Seal Pressure Ring	3
6	501201410	PF Crankcase	1	38	590104033	TF12 Main Water Seal	6
7	501201400	PF Crankshaft	1	39	504101220	TF12 Main Water Seal Gasket	3
8	590303005	Bearing	2	40	504101240	TF12 Main Water Seal Spring	3
9	501201420	PF Gasket	2	41	504101110	TF Water Seal Spring Seat	6
10	590101117	O-ring	2	42	504101110	TF Checking Valve Bush	3
11	501201380	PF Connect Flange	1	43	504101120	TF Seal Gasket	6
12	590108009	TC Crankshaft Oil Seal	1	44	590101079	O-ring	3
13	590201010	Screw	12	45	504101040	TF Suction Valve Spring	3
14	500011004	Flat Key	1	46	504101050	TF Suction Valve Block	3
15	301051201	PF Connecting Rod	3	47	504101060	TF Checking Valve Seat	3
16	590205008	Washer	6	48	504101080	TF Delivery Valve Spool	3
17	501201450	PF Plunger Pin	3	49	504101070	TF Delivery Valve Spring	3
18	501201440	PF Plunger Rod	3	50	504101090	TF Delivery Valve Support	3
19	504101130	Bolt	3	51	504101010	TF Cylinder Head	1
20	504101140	TF12 Plunger Connect Seat	3	52	590201057	Screw	24
21	504101160	TF12 Ceramic Plunger	3	53	590201058	Screw	8
22	101712020	PF Square Cap	6	54	501201350	PF Lift Ring	1
23	101712030	PF Round Cap	14	55	590201026	Screw	1
24	590107006	TC4 Plunger Oil Seal	3	56	501201390	PF Side Cover	1
25	501201430	PF Support	3	57	590101075	O-ring	1
26	501201340	PF Washer	3	58	501201320	PF Side Oil Level	1
27	504101030	TF Support Pressure Ring	3	59	501201330	PF Side Oil Indicator	1
28	504101020	TF Connecting Block	1	60	301151201	PF Dipstick	1
29	590101100	O-ring	1				
30	590201056	Screw	30				
31	590205002	Washer	3				
32	504101180	TF12 Aux. Water Seal Gasket	3				

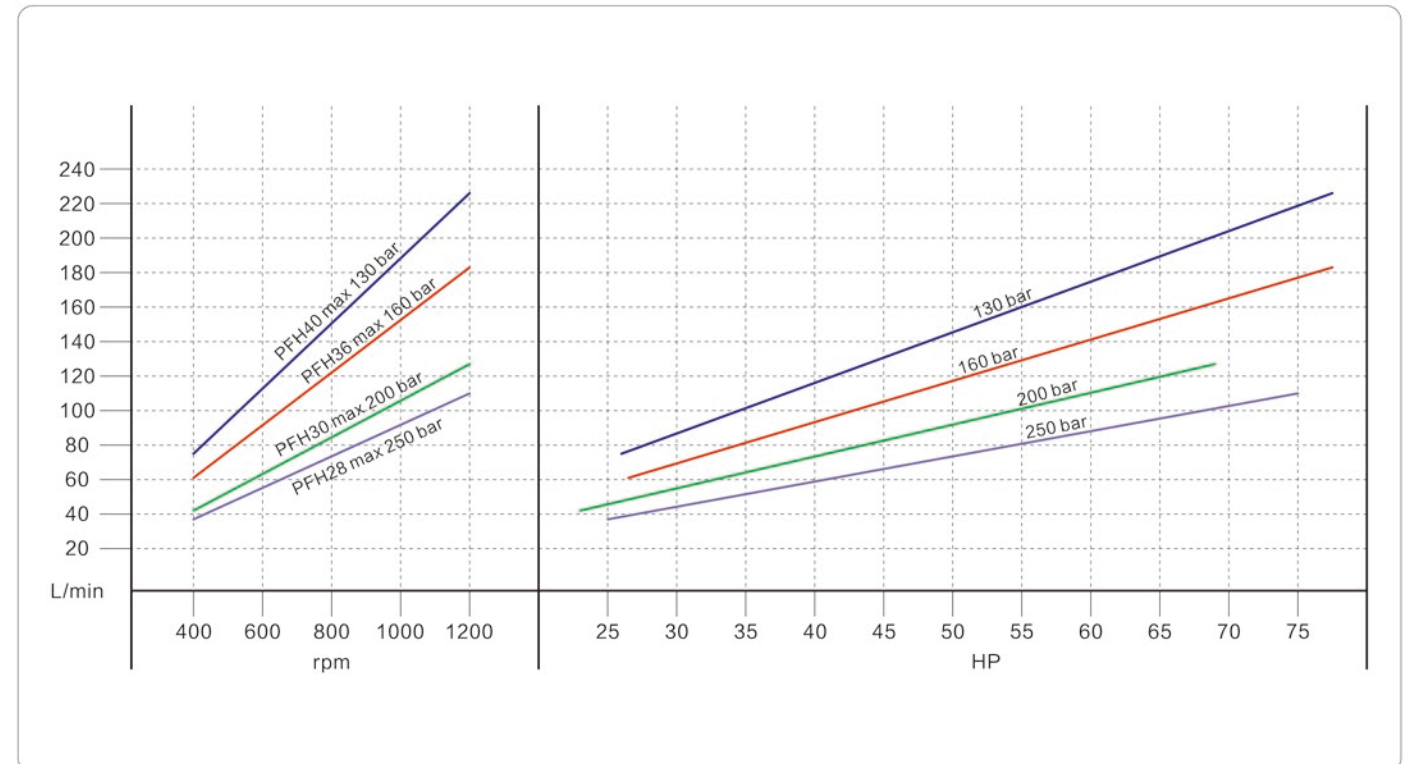
PFH SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron, Nickel Treatment
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- External Gearbox
- Drain Valve



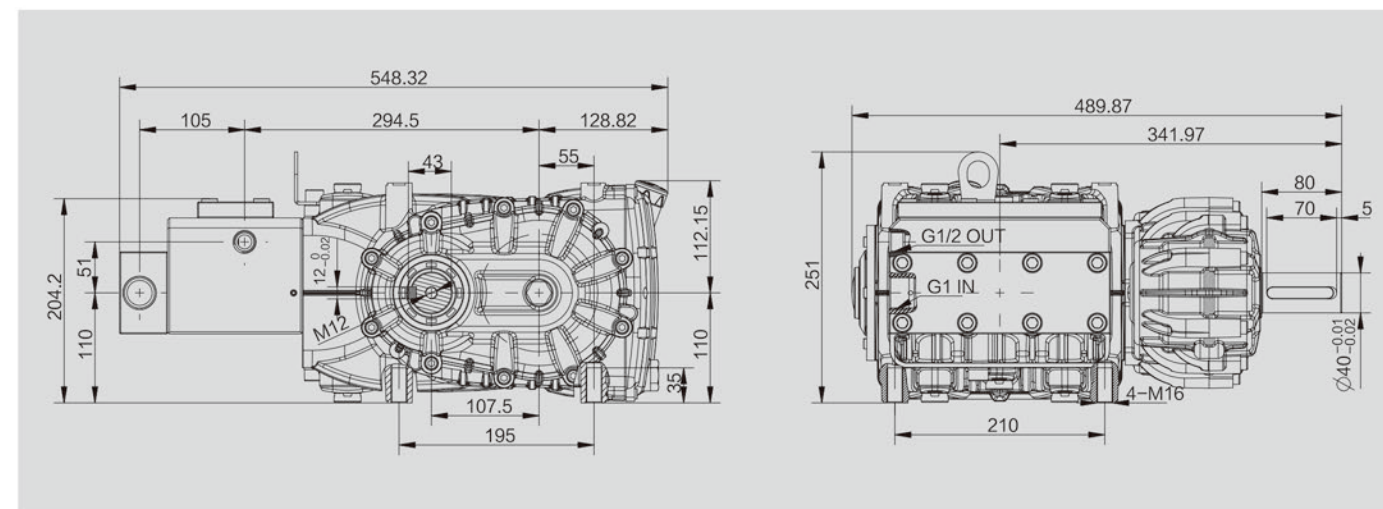
Model	Flow Rate		Pressure			Speed (r.p.m)			Power		Weight kg
	L/min	gpm	bar	p.s.i	Mpa	1:1.25	1:1.5	1:1.83	hp	kw	
PFH28	110	29.1	250	3625	25	1500/1800/2200			75	55	
PFH30	127	33.5	200	2900	20	1500/1800/2200			68	50	
PFH36	183	48.3	160	2320	16	1500/1800/2200			75	55	
PFH40	226	59.7	130	1885	13	1500/1800/2200			75	55	



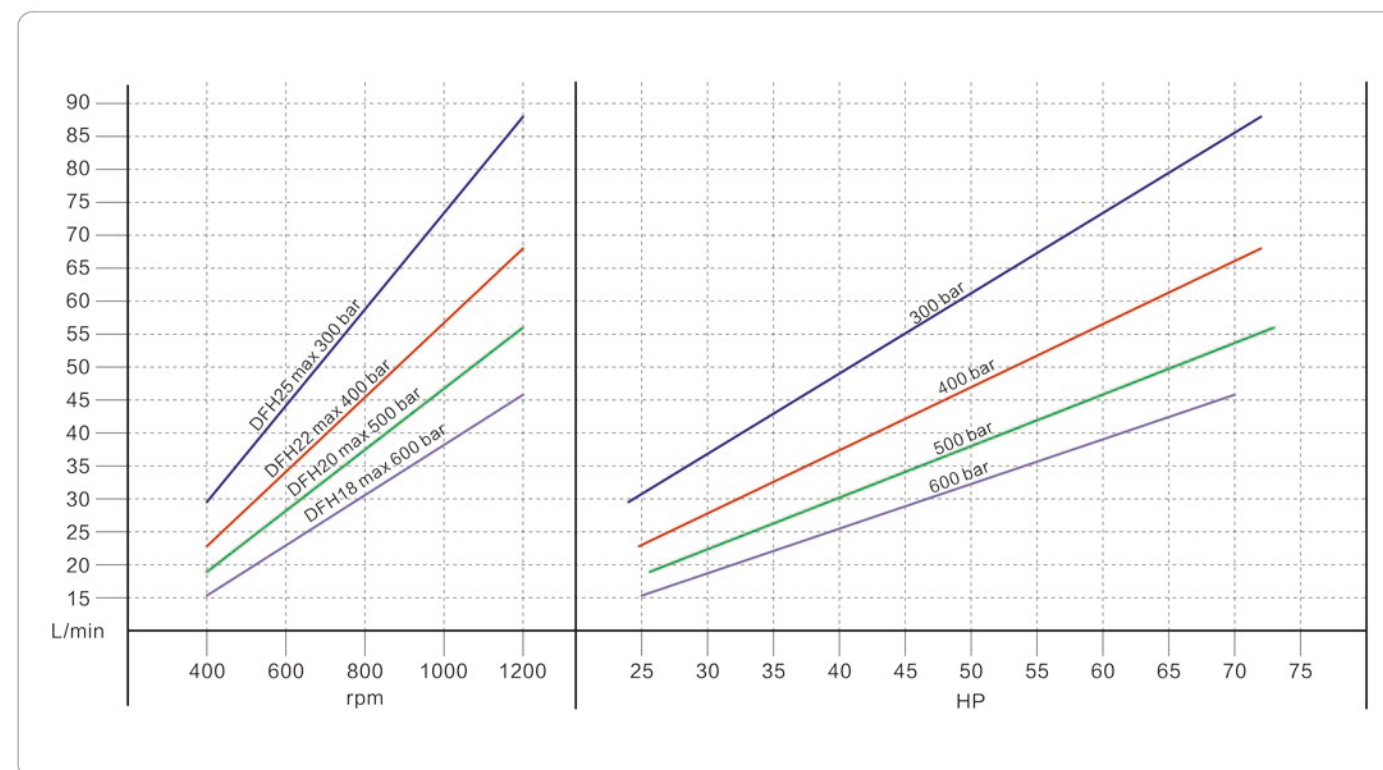
DFH SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron, Nickel Treatment
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- External Gearbox
- Drain Valve



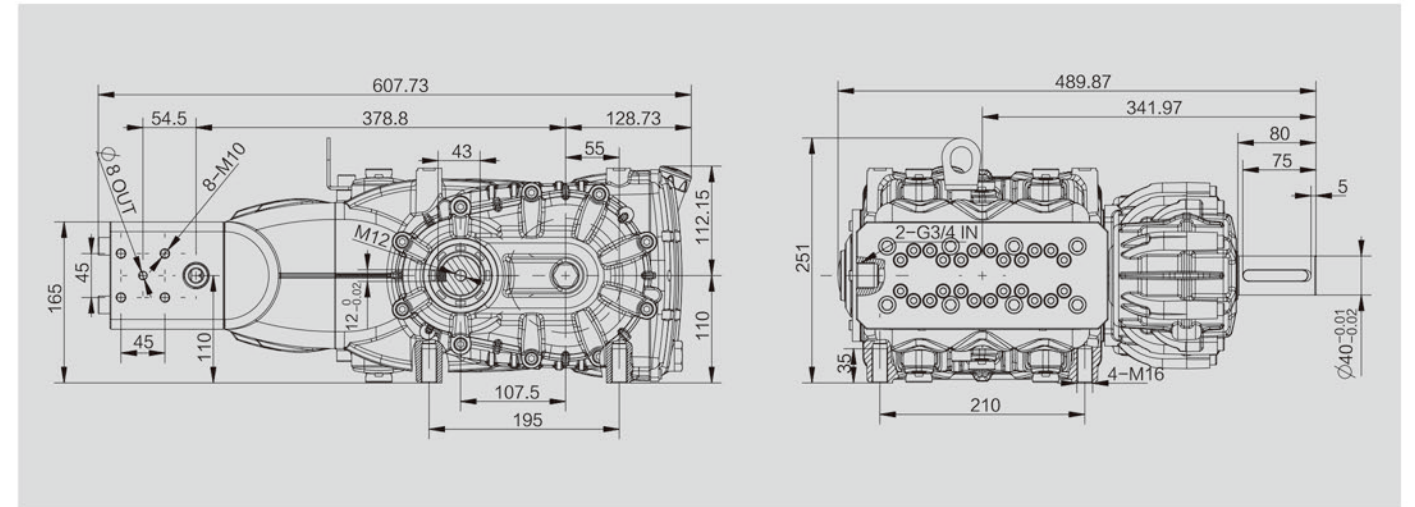
Model	Flow Rate		Pressure			Speed (r.p.m)			Power		Weight kg
	L/min	gpm	bar	p.s.i	Mpa	1:1.25	1:1.5	1:1.83	hp	kw	
DFH18	45	11.9	600	8700	60	1500/1800/2200			70	51.5	
DFH20	56	14.8	500	7250	50	1500/1800/2200			73	53.7	
DFH22	68	18	400	5800	40	1500/1800/2200			71	52.2	
DFH25	88	23.2	300	4350	30	1500/1800/2200			70.7	52	



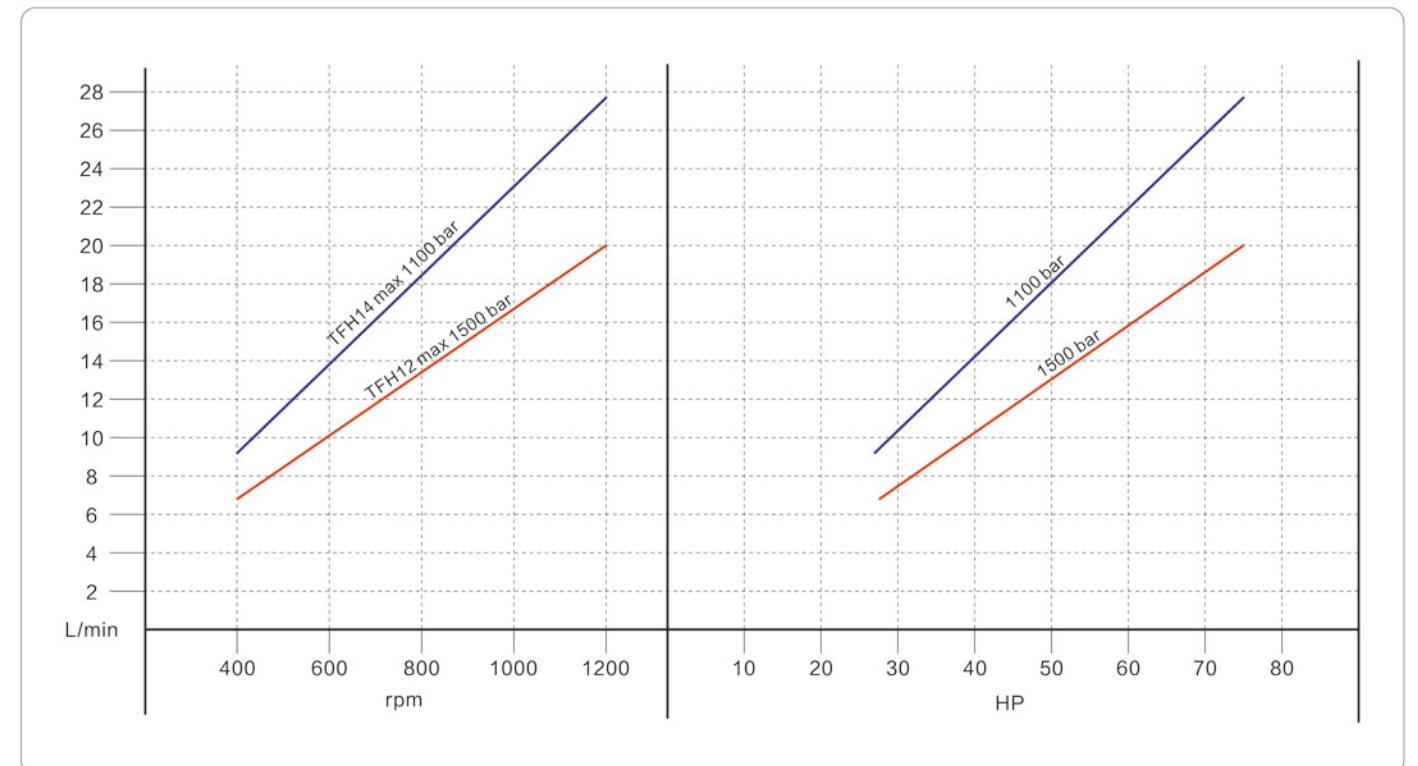
TFH SERIES

FEATURES

- Forged Manifold, Spherical Cast Iron, Nickel Treatment
- Cast Iron Crankcase
- Hardened Alloy Steel Crankshaft
- Forged Connecting Rod, High Precision Finish
- Ceramic Plunger, Precision Grinding
- Double Pressure Packing, High-Low with integrated cooling
- High Volumetric Efficiency Suction/ Delivery Valves
- Symmetrical Design, Easy Shaft Conversion of Left to Right
- Splash Lubrication
- External Gearbox
- Drain Valve

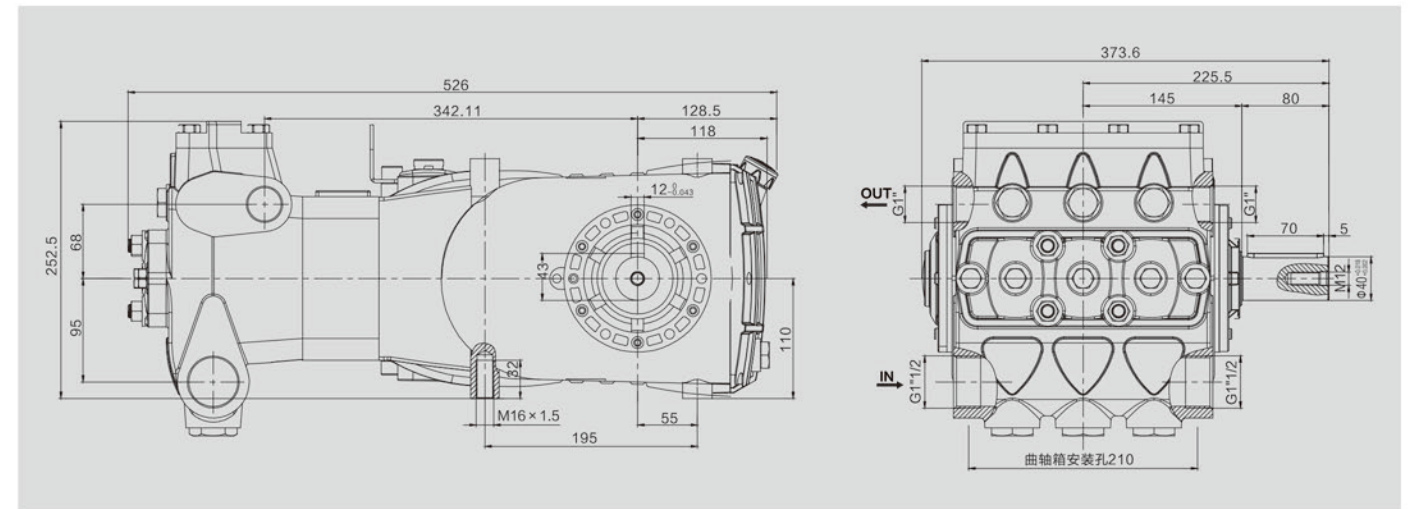
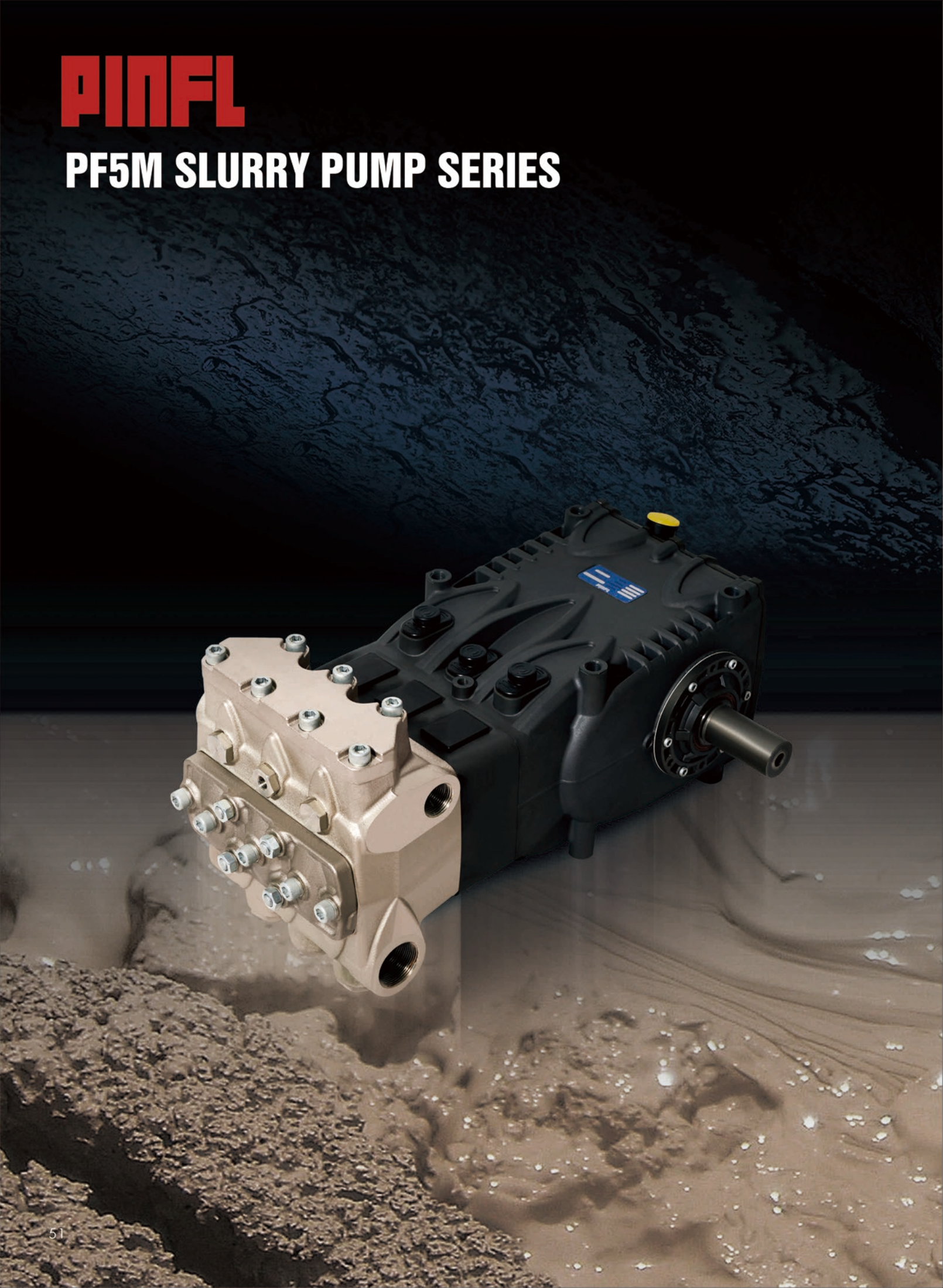


Model	Flow Rate		Pressure			Speed (r.p.m)			Power		Weight kg
	L/min	gpm	bar	p.s.i	Mpa	1:1.25	1:1.5	1:1.83	hp	kw	
TFH12	20	5.3	1500	21750	150	1500/1800/2200			75	55	
TFH14	28	7.4	1100	15950	110	1500/1800/2200			75	55	



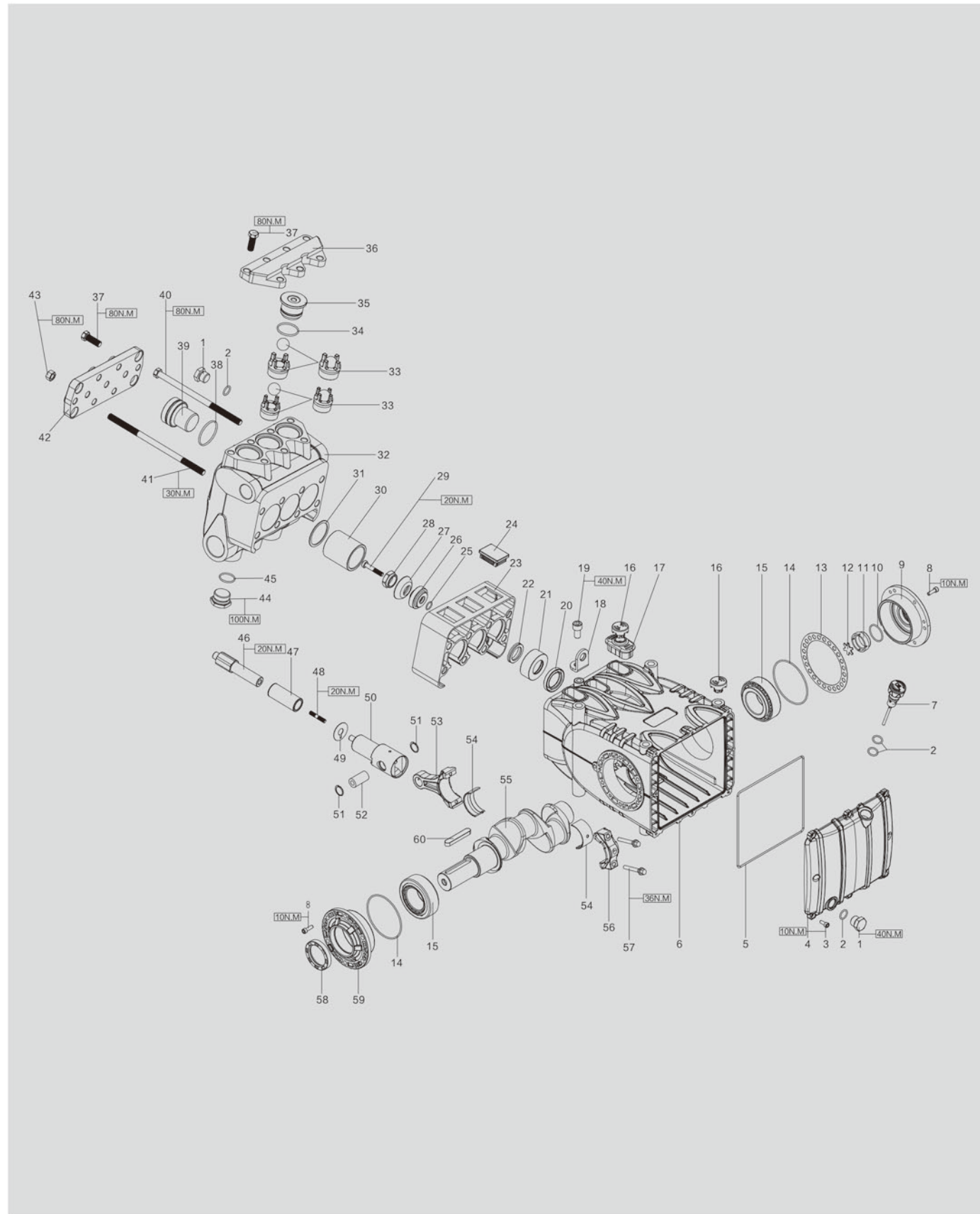
PINFL

PF5M SLURRY PUMP SERIES



Model	Flow Rate		Pressure			Speed	Power		Weight
	L/min	gpm	bar	p.s.i	Mpa	r.p.m	hp	kw	kg
PF5M	177	46.8	50	750	5	600	24	18	69
PF5M	177	46.8	80	1160	8	600	38	28	69

PF5M SPARE PARTS



PF5M DETAILED LIST

No.	Description	Q'ty	No.	Description	Q'ty
1	Plug	4	33	PF5M Checking Valve	6
2	O-ring	4	34	O-ring	3
3	Screw	8	35	PF5M Delivery Valve Plug	3
4	PF Rear Cover	1	36	PF Valve Cover	1
5	O-ring	1	37	Screw	12
6	PF Crankcase	1	38	O-ring	3
7	PF Dipstick	1	39	PF5M Suction Valve Cover	3
8	Screw	12	40	Bolt	4
9	PF Left Cover	1	41	PF5M Bolt	4
10	O-ring	1	42	PF5M Suction Valve Cover	1
11	PF Side Oil Level	1	43	Screw	4
12	PF Side Oil Indicator	1	44	Plug	3
13	PF Gasket		45	O-ring	3
14	O-ring	2	46	PF5M Piston Rod	3
15	Bearing	2	47	PF5M Piston	3
16	PF Round Cap	14	48	PF5M Bolt	4
17	PF Square Cap	6	49	Washer	3
18	Lift	1	50	PF Plunger Rod	3
19	Screw	1	51	Circlip	6
20	Plunger Oil Seal	3	52	PF Plunger Pin	3
21	PF5M Rear Guide Ring	3	53	PF Connecting Rod	3
22	PF5M Aux. Water Seal	3	54	PF Bearing Bush	6
23	PF5M Cylinder Seat	3	55	PF Crankshaft	1
24	PF5M Anti-Dust Cover	3	56	PF Connecting Rod Cover	3
25	O-ring	3	57	PF Connecting Rod Blot	6
26	PF5M Main Water Seal Support Ring	3	58	Crankshaft Oil Seal	1
27	PF5M Main Water Seal	3	59	PF Connect Flange	1
28	PF5M Main Water Seal Press Cap	3	60	Flat Key	1
29	PF5M Main Water Seal Press Screw	3			
30	PF5M Cylinder Sleeve	3			
31	Gasket	3			
32	PF5M Pump Body	1			