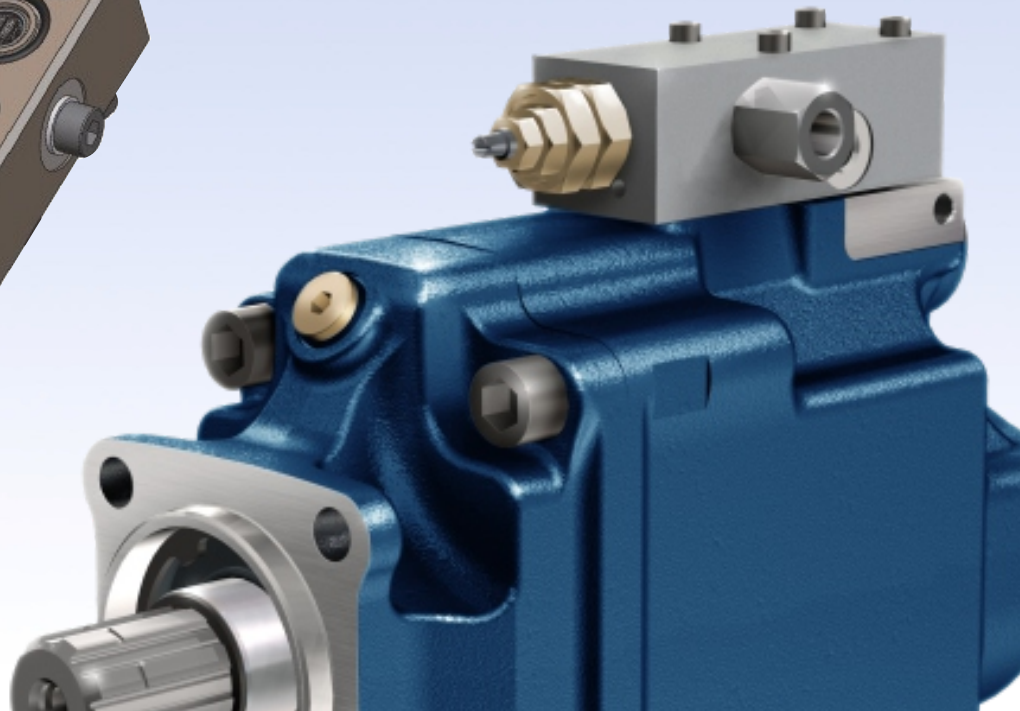
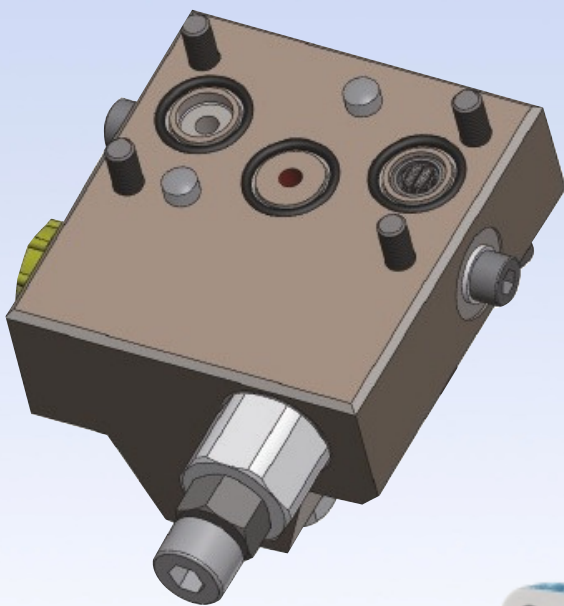


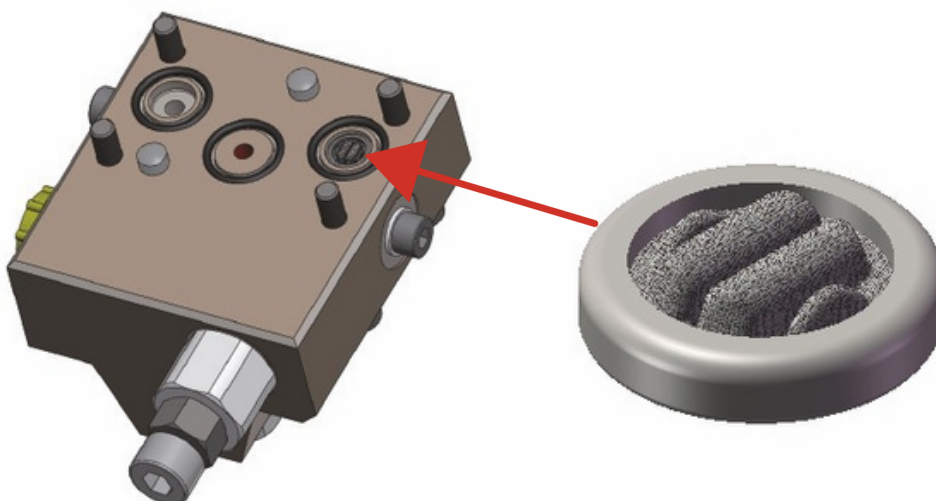
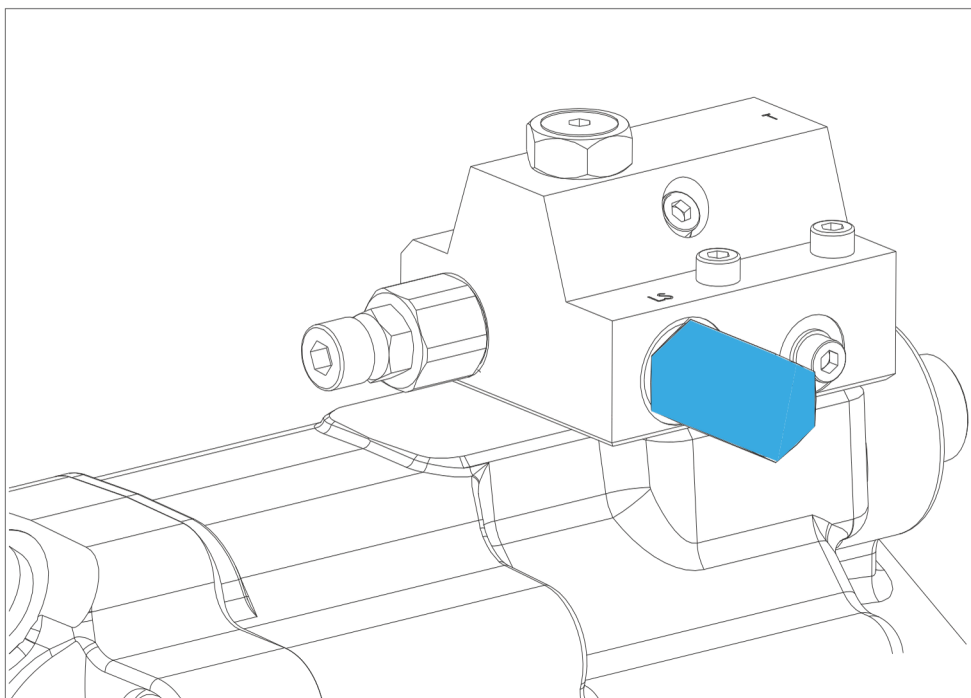
LS Adapter for Variable Piston Pumps

LS Adapter for Hydraulic Variable Piston Pumps

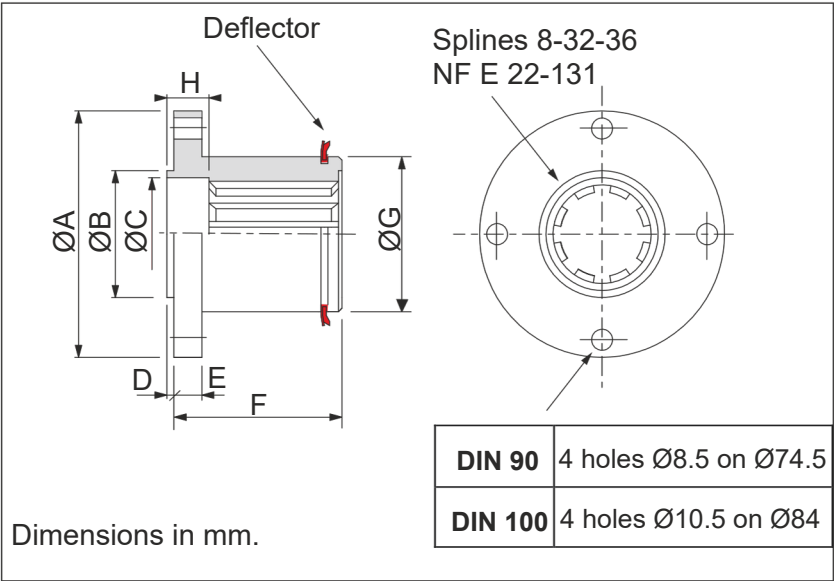
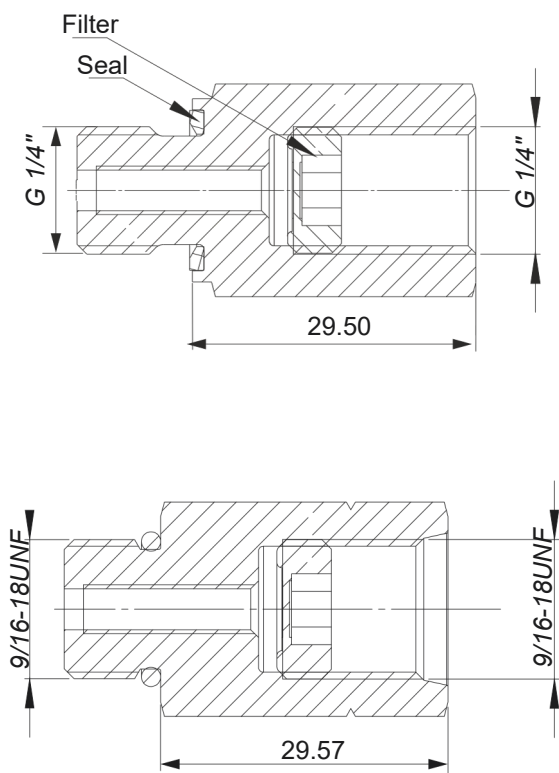
Design;
Circulation



LS Adapter for Variable Piston Pumps



LS Adapter for Var able P ston Pumps



Complete Product Range

Bent Axis Piston Motors

A9MD (DIN) Bent Axis Motors
A9MO (ISO) Bent Axis Motors
A9MS (SAE) Bent Axis Motors
A9ML (SAE2) Bent Axis Motors
A9MF (Fixed Plug in) Bent Axis Motors
A10M (HYBRID) Bent Axis Motors
A7GM Hydraulic Gear Motors
A7GMT Tandem Hydraulic Gear Motors

Bent Axis Piston Pumps

A8P (Aluminum) Bent Axis Pumps
A8PD (DIN) Bent Axis Pumps A8PO
(ISO) Bent Axis Pumps A8PS (SAE)
Bent Axis Pumps A8PF (Fixed Plug in)
Bent Axis Pumps A10 (HYBRID) Bent
Axis Pumps A11 (ISO2) Bent Axis
Pumps A11 (SAE2) Bent Axis Pumps

Variable Displacement Pumps

A12V Variable Displacement Pumps

Dual Flow Piston Pumps

A8PL (DIN) Dual Flow Pumps

Axial Piston & Gear Pumps

A4PP Axial Hydraulic Pumps
A6HP High Pressure Pumps
A7GP Hydraulic Gear Pumps
A7GPT Tandem Hydraulic Gear Pumps

Valve (ByPass) (Flushing) (Cavitation)

Circulation Valve
ByPass Valve
Anti-Cavitation Valve
Flushing Valve
LS Valve
AntiShock Valve
Speed Sensor

Hydraulic Spare Parts

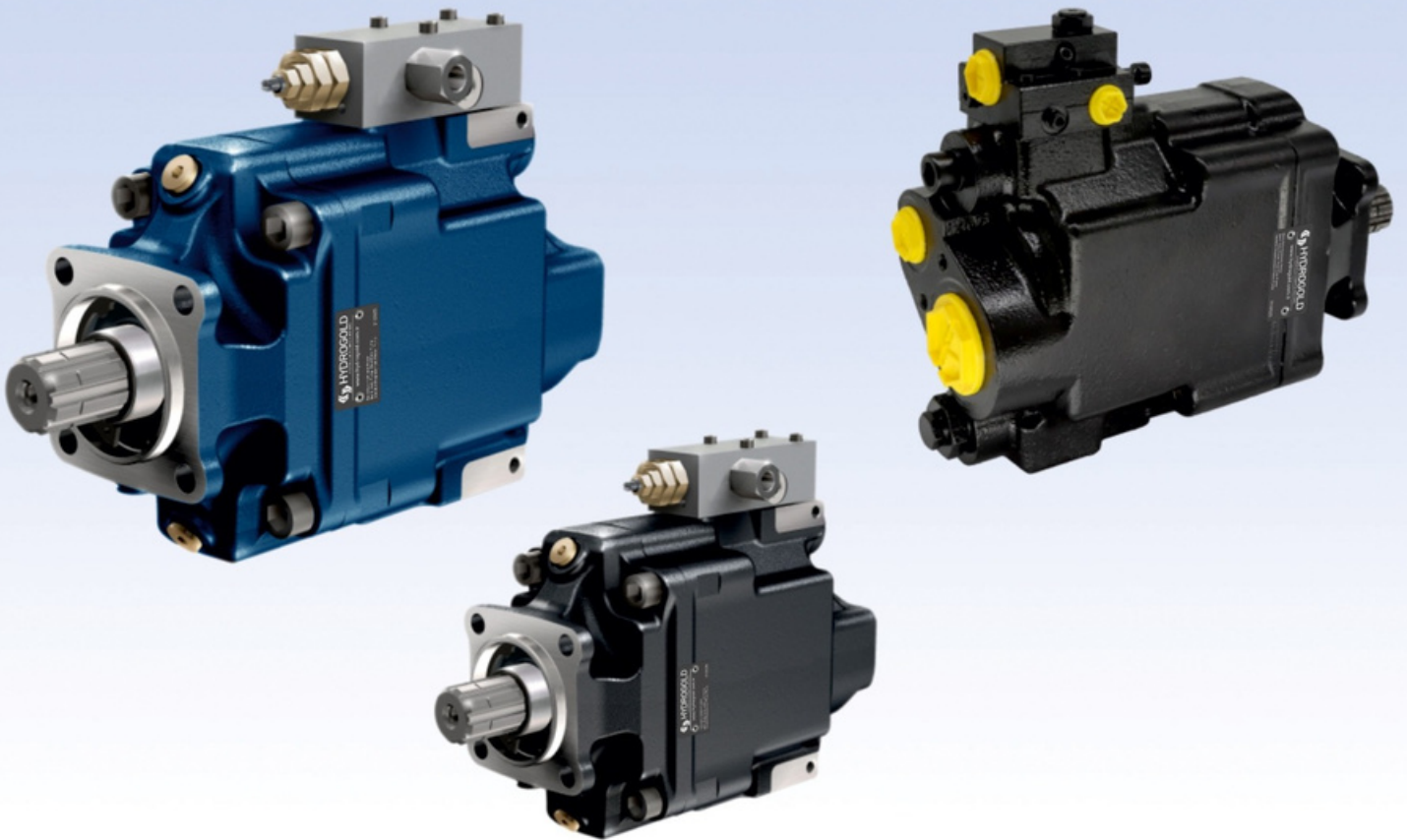
Suction Fittings
Couplers
Adapters
Flanges
Power Take Off
Monoblock Valve
Section Valve

HXV Değışken Debim Pistonlu Pompa

NewDevelopmentVariableDisplacementPiston Pumps, High Pressure Pumps,
380/420 BAR Working Pressure. High Rotational Speed, High Efficiency,
SI Metric Design, Cast Iron Pump Body, Re-Designed in 2025.

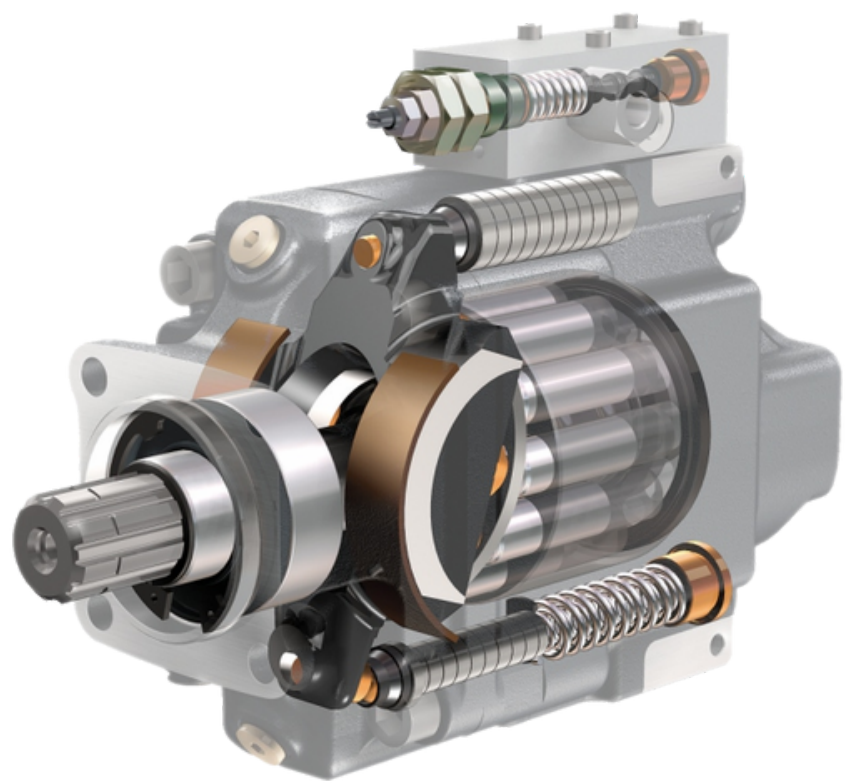
Designation;

40cc, 60cc, 75cc, 92cc, 120cc, 130cc, 150cc



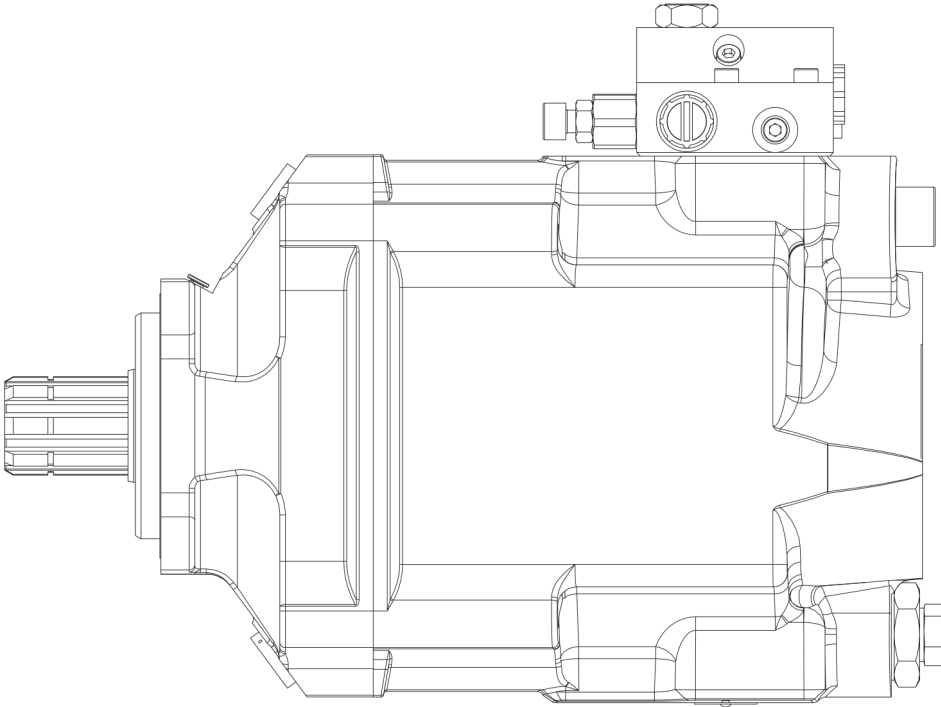
Characteristics of the HXV Variable Displacement Piston Pumps

Pump MODEL	DISPL. (cc)	MAX. OPERATING PRESSURE (bar)	MAX. PEAK PRESSURE INTERMITTENT (bar)	TORQUE AT 300 BAR (N.m)	MAX. SPEED AT FULL DISPLACEMENT (rpm)	WEIGHT (kg)	OVERHANG TORQUE (N.m)
HXV 40 (CW/CCW) new b-d rect onal	40	400	420	225	3000	26	34
HXV 60 (CW/CCW) new b-d rect onal	60	400	420	335	2600	26	34
HXV 75 (CW/CCW) new b-d rect onal	75	400	420	420	2000	26	34
HXV 92 (CW/CCW) new b-d rect onal	92	400	420	515	1900	26	34
HXV 120 (CW/CCW) new b-d rect onal	120	380	400	675	2100	26	34
HXV 130 (CW/CCW) new b-d rect onal	130	380	400	730	2100	28	38
HXV 150 (CW/CCW) new b-d rect onal	150	380	400	840	2000	28	38



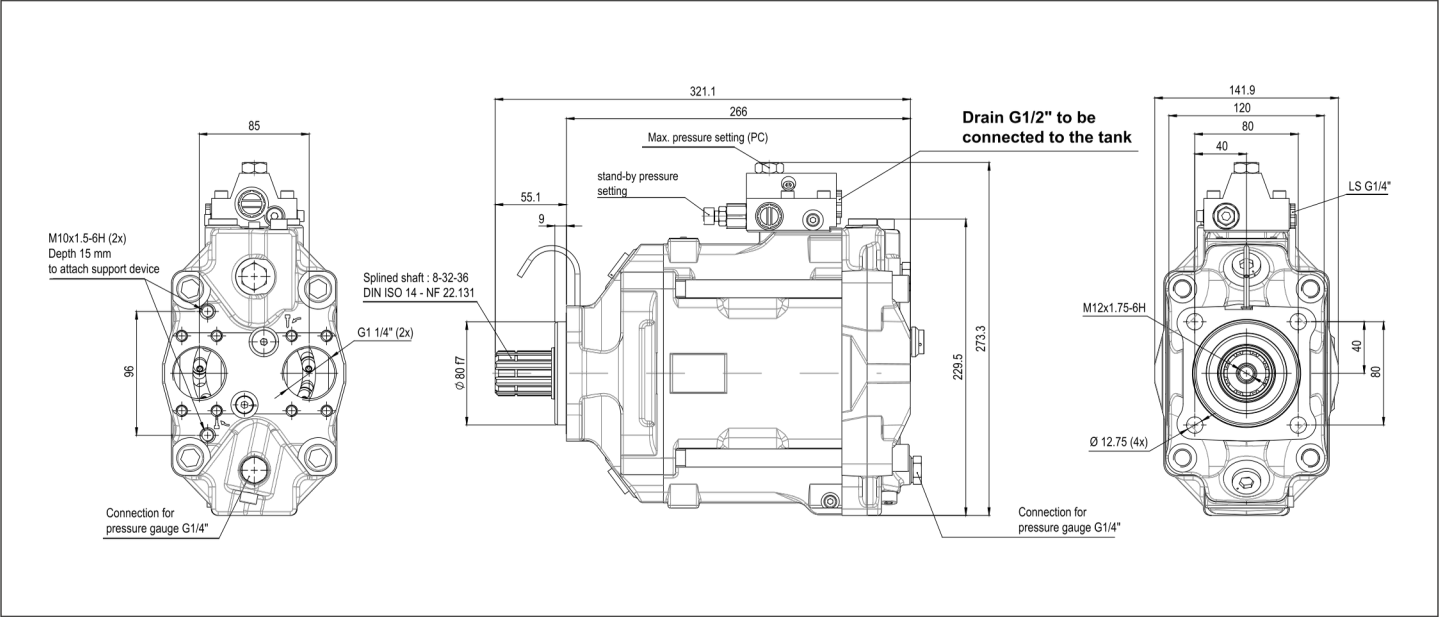
Order ng Code; HXV Var able Dsplcmnt P ston Pumps

Model Code	D splacement	Shaft Type	Flange Type	Rotat on	Seal ng			
HXV	92	S	H4	BD	V			
HXV Var able D splcmnt Hydraul c P ston Pump DIN Flge	40	S Spl ned Shaft (default) 8x32x36 DIN ISO 14NF	H4 ISO 7653 Ø80 4 Bolt Flange	BD B -D rect onal	V V ton H gh Pressure Seal			
	60			CW RIGHT D rect on of Rotat on				
	75			CCW LEFT D rect on of Rotat on	N N tr le Seal 5/10 Bar			
	92							
	120							
	130	K Parallel Keyed Shaft (spec al) DIN 6885						
	150							

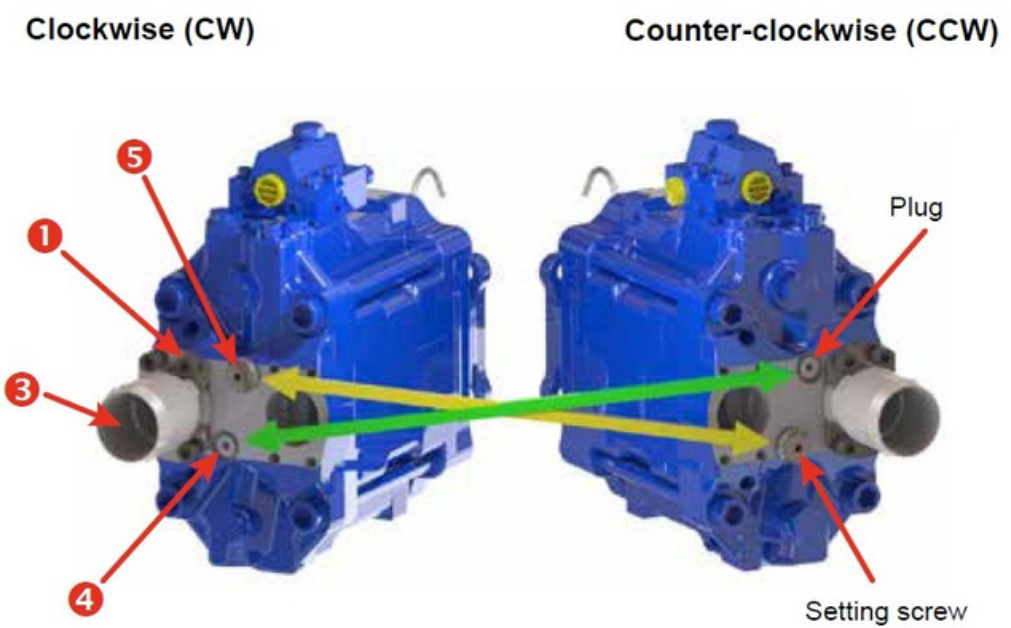


HXV - all s ze B -D rect onal Vers on

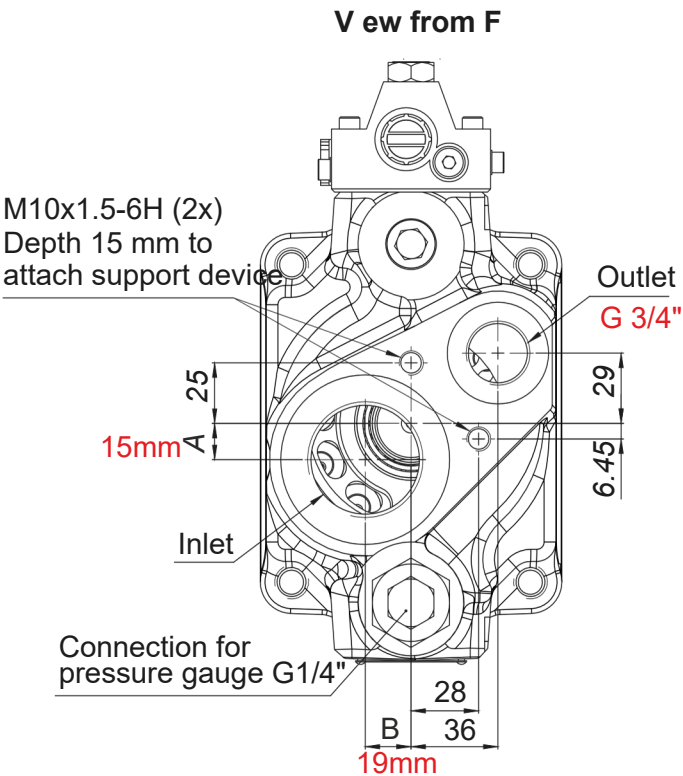
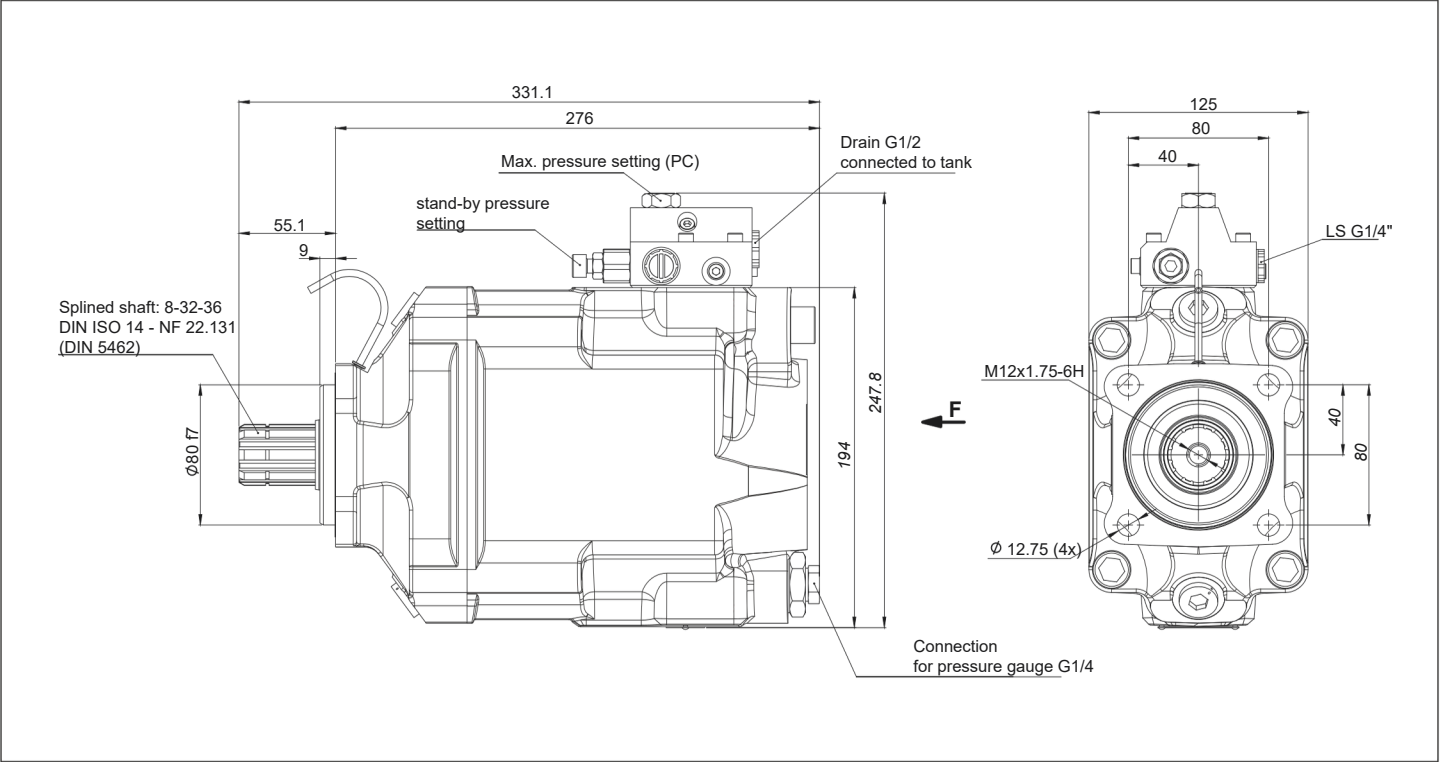
40cc, 60cc, 75cc, 92cc, 110cc, 120cc, 130cc, 150cc



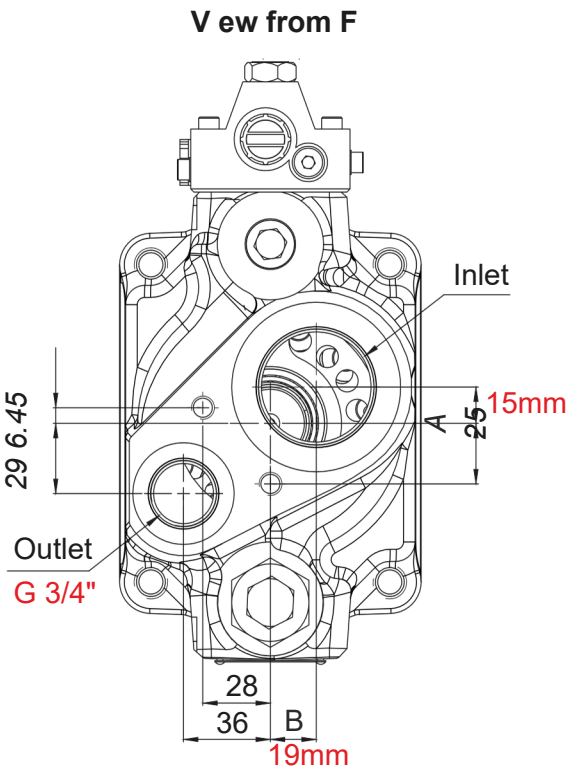
B -D rect onal Rotat on



HXV - 40 cc Var able P ston Pump

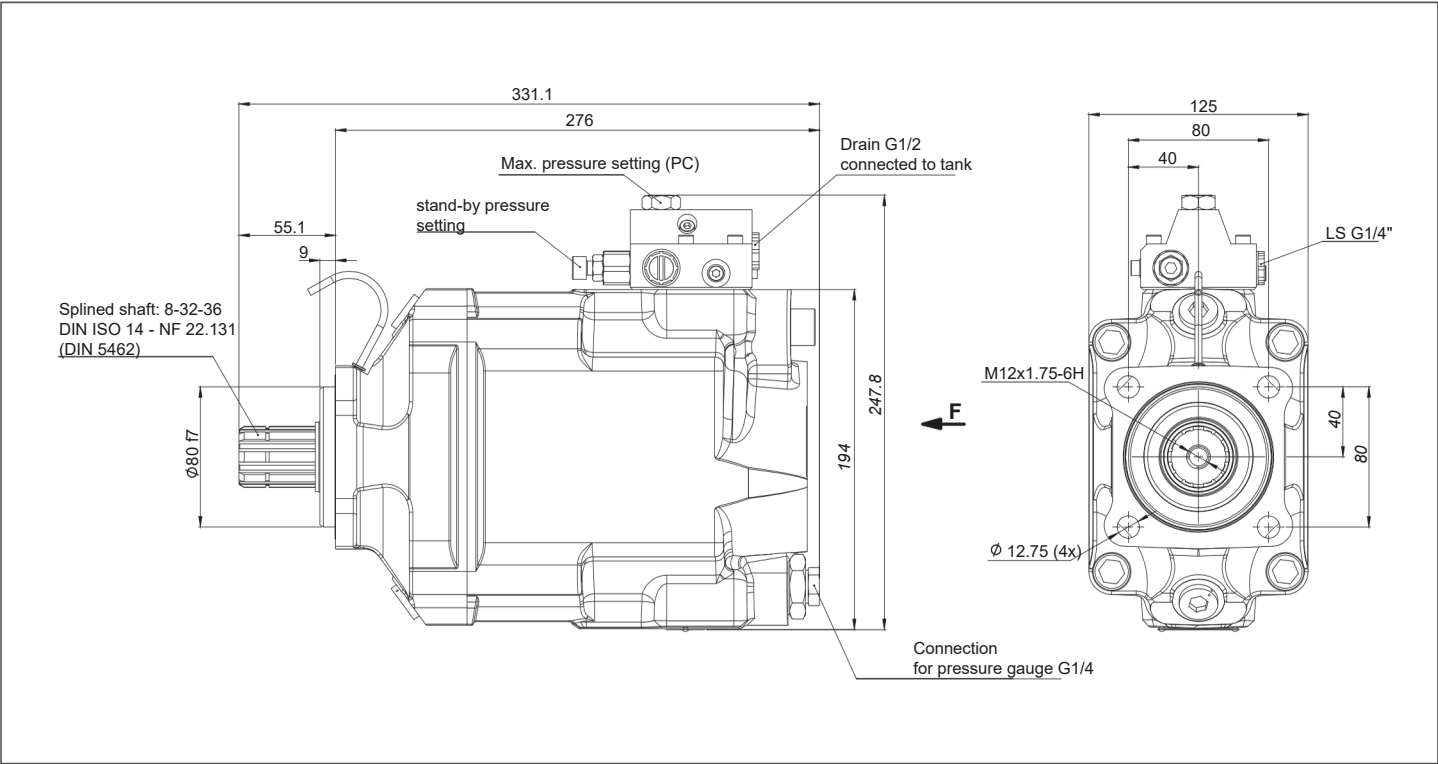


CW

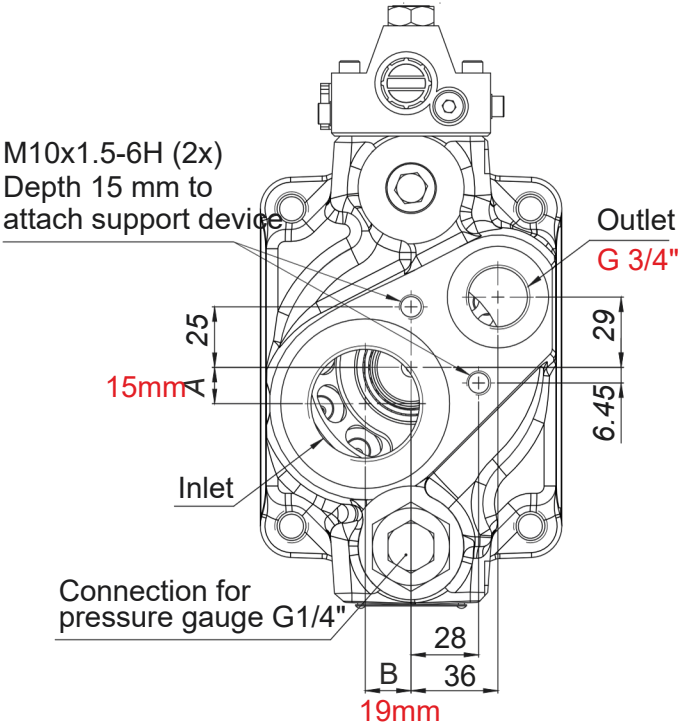


CCW

HXV - 60 cc Var able P ston Pump

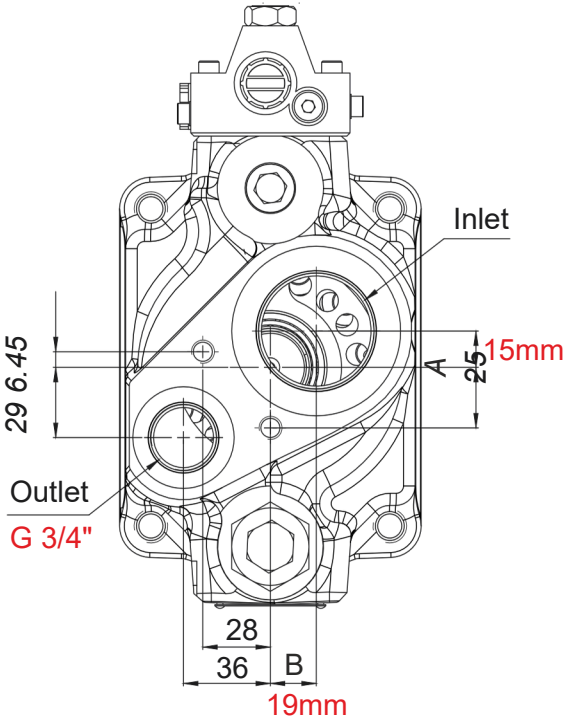


View from F



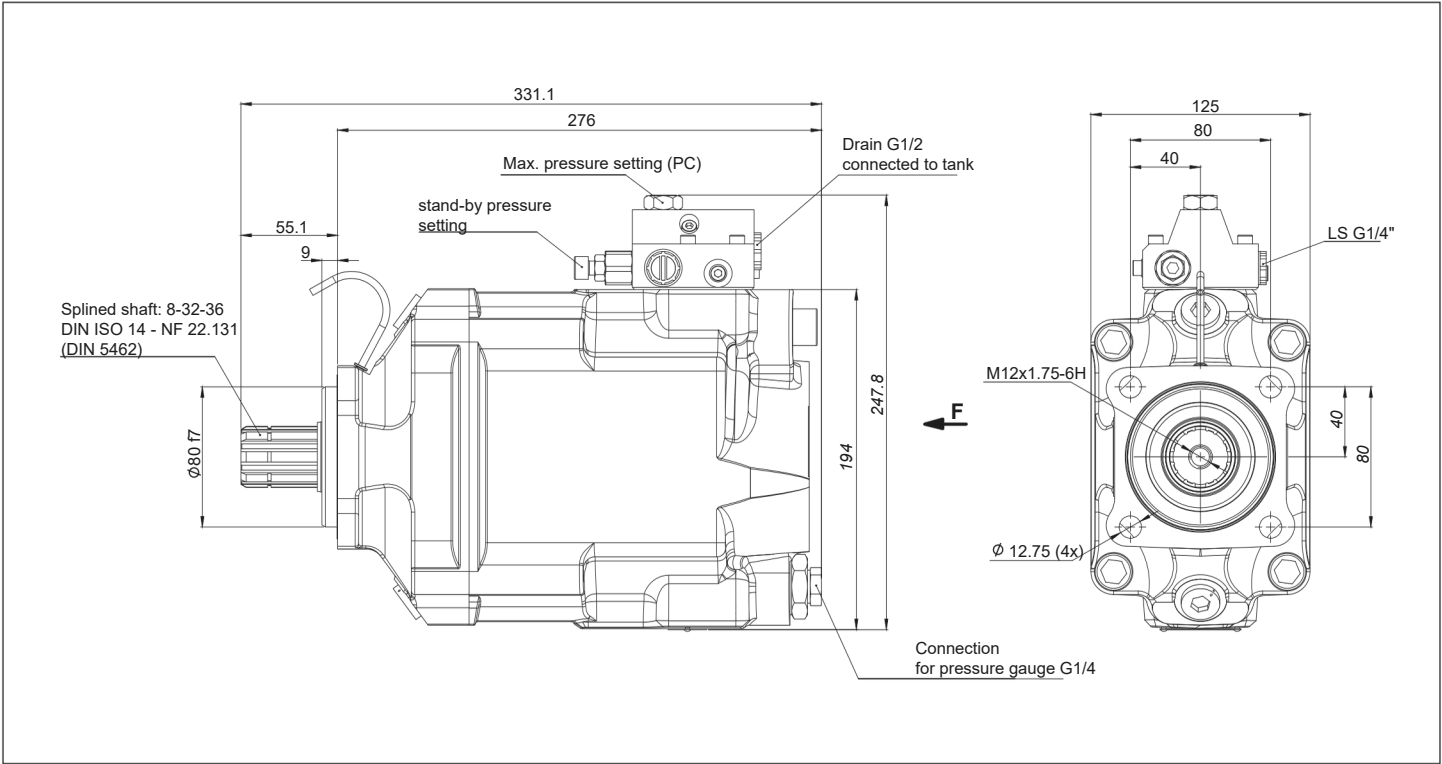
CW

View from F

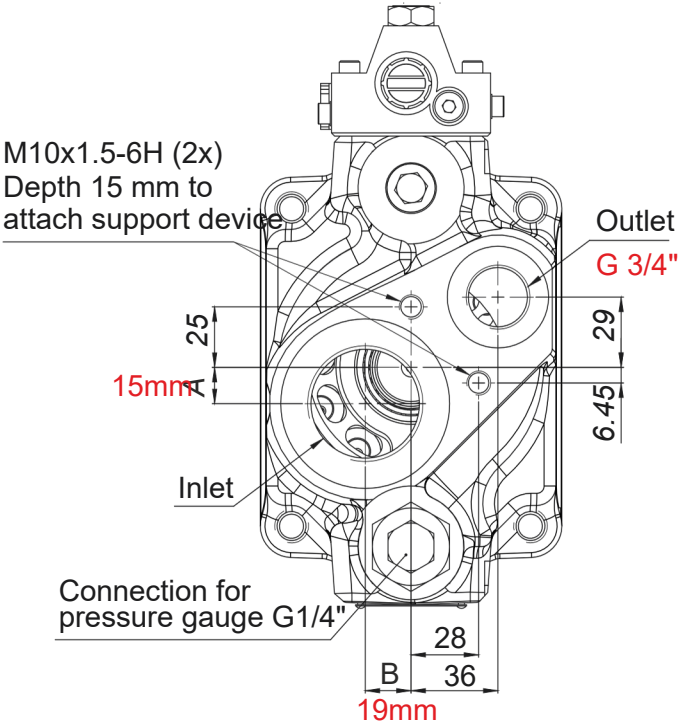


CCW

HXV - 75 cc Var able P ston Pump

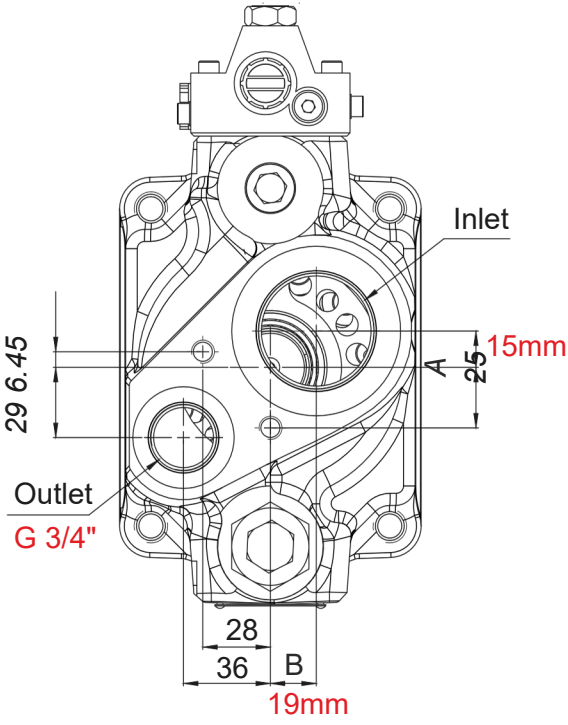


View from F



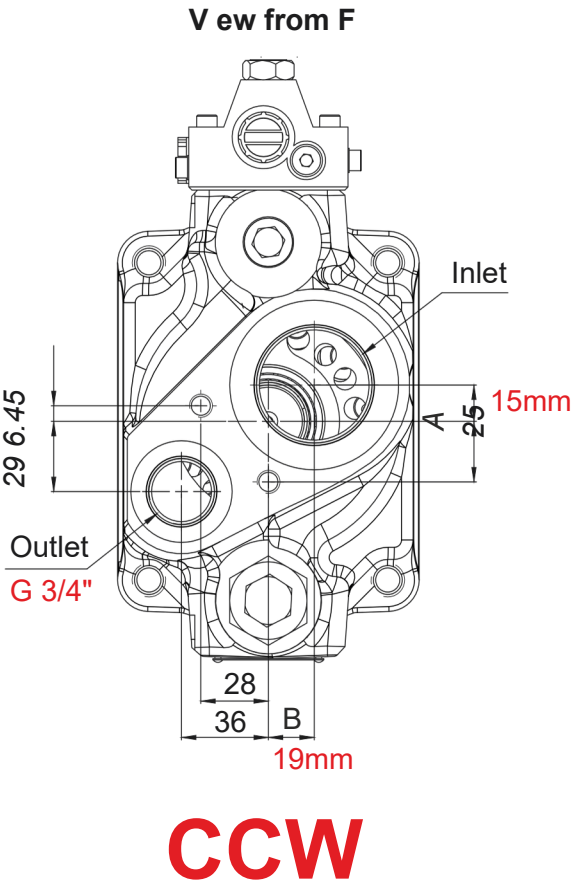
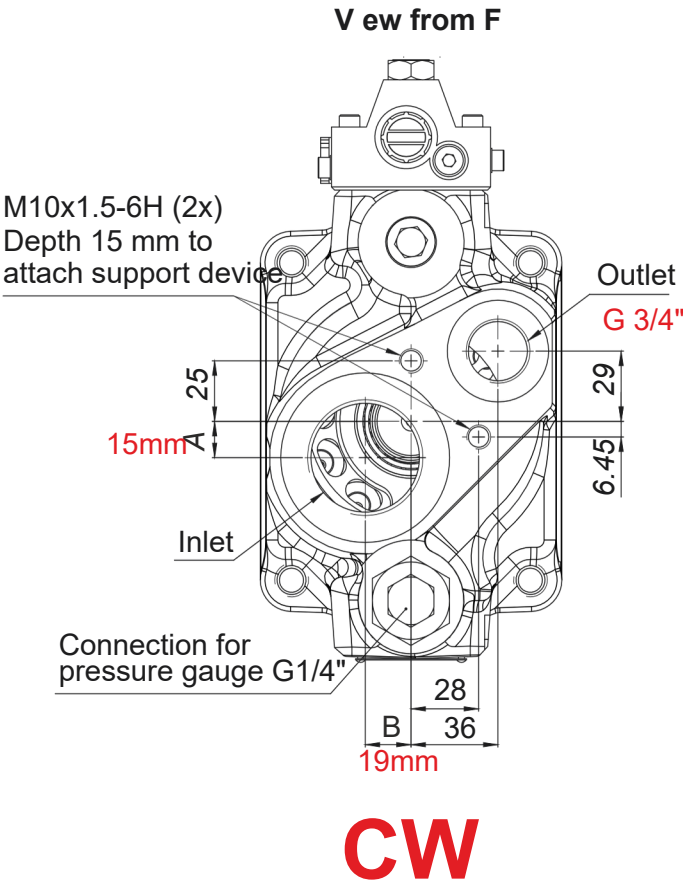
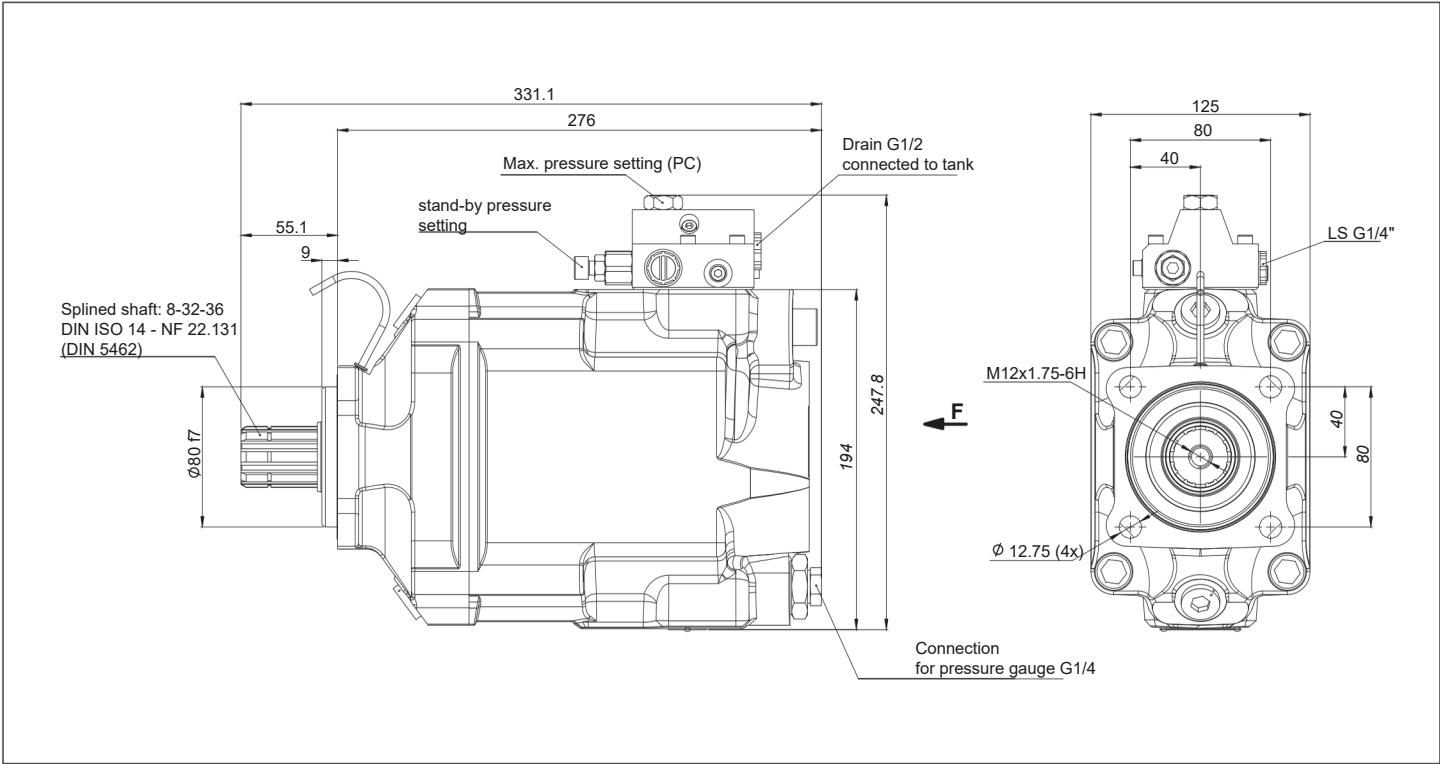
CW

View from F

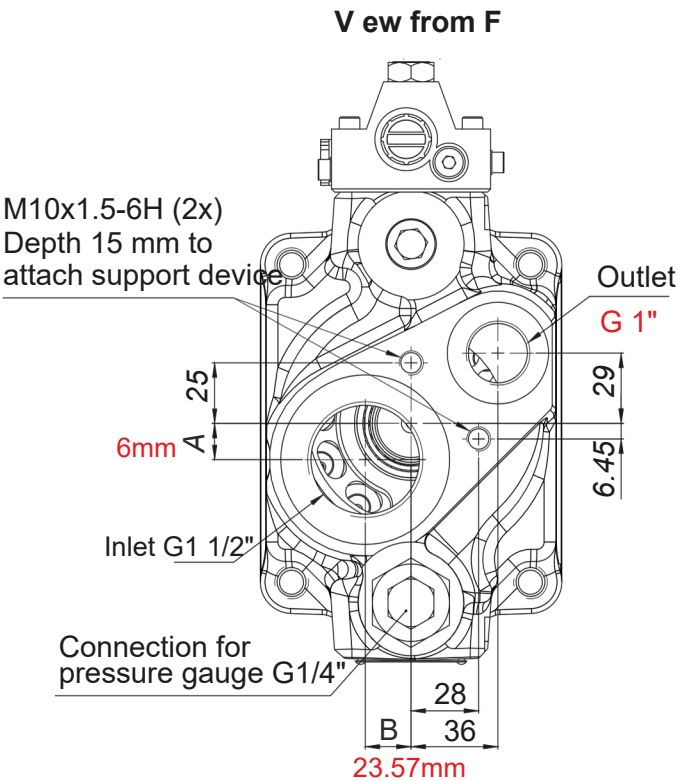
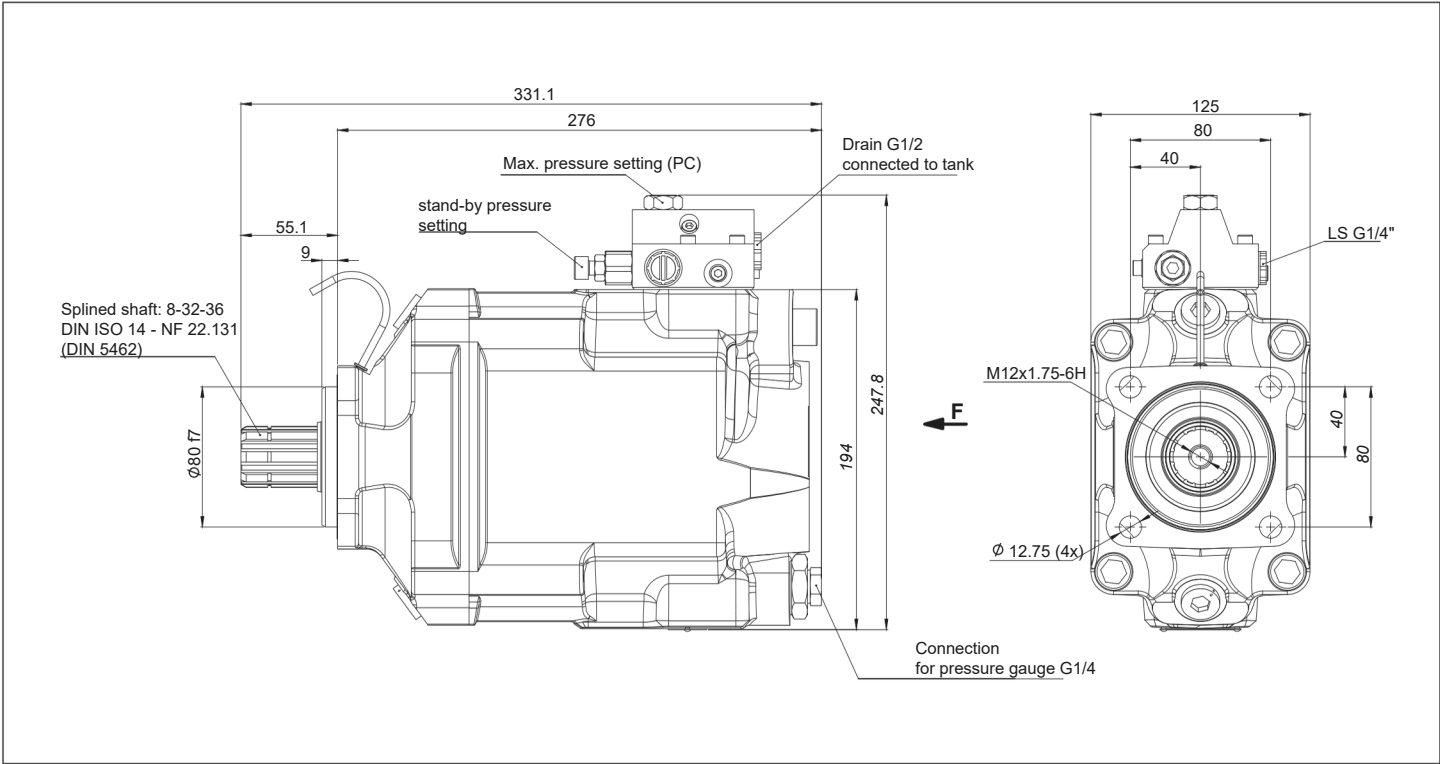


CCW

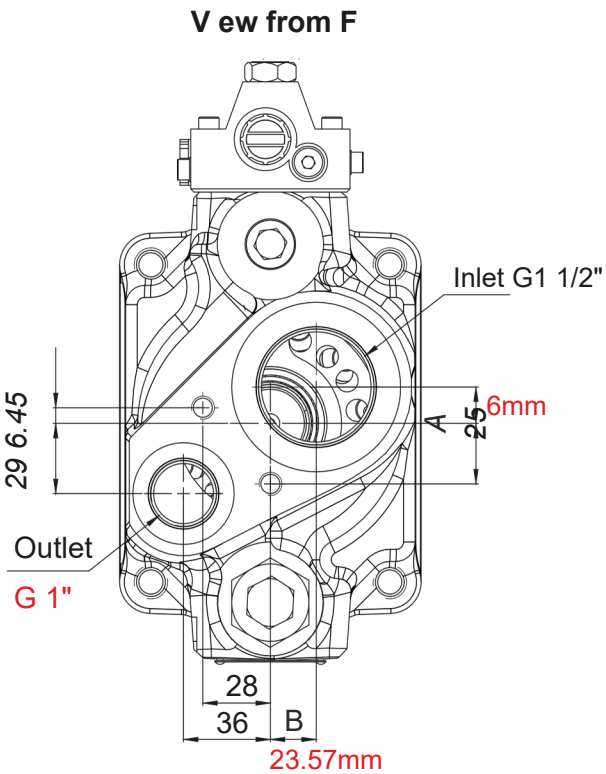
HXV - 92 cc Var able P ston Pump



HXV - 120 cc Var able P ston Pump

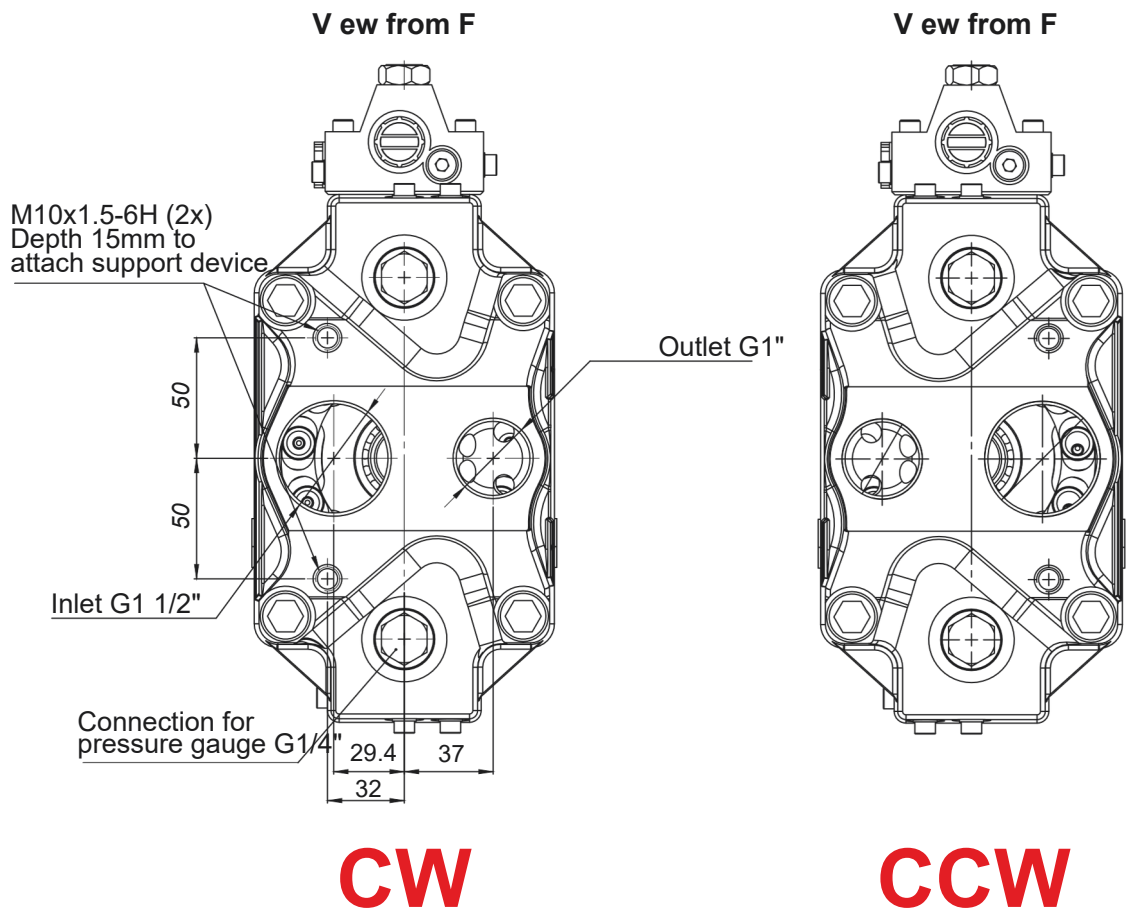
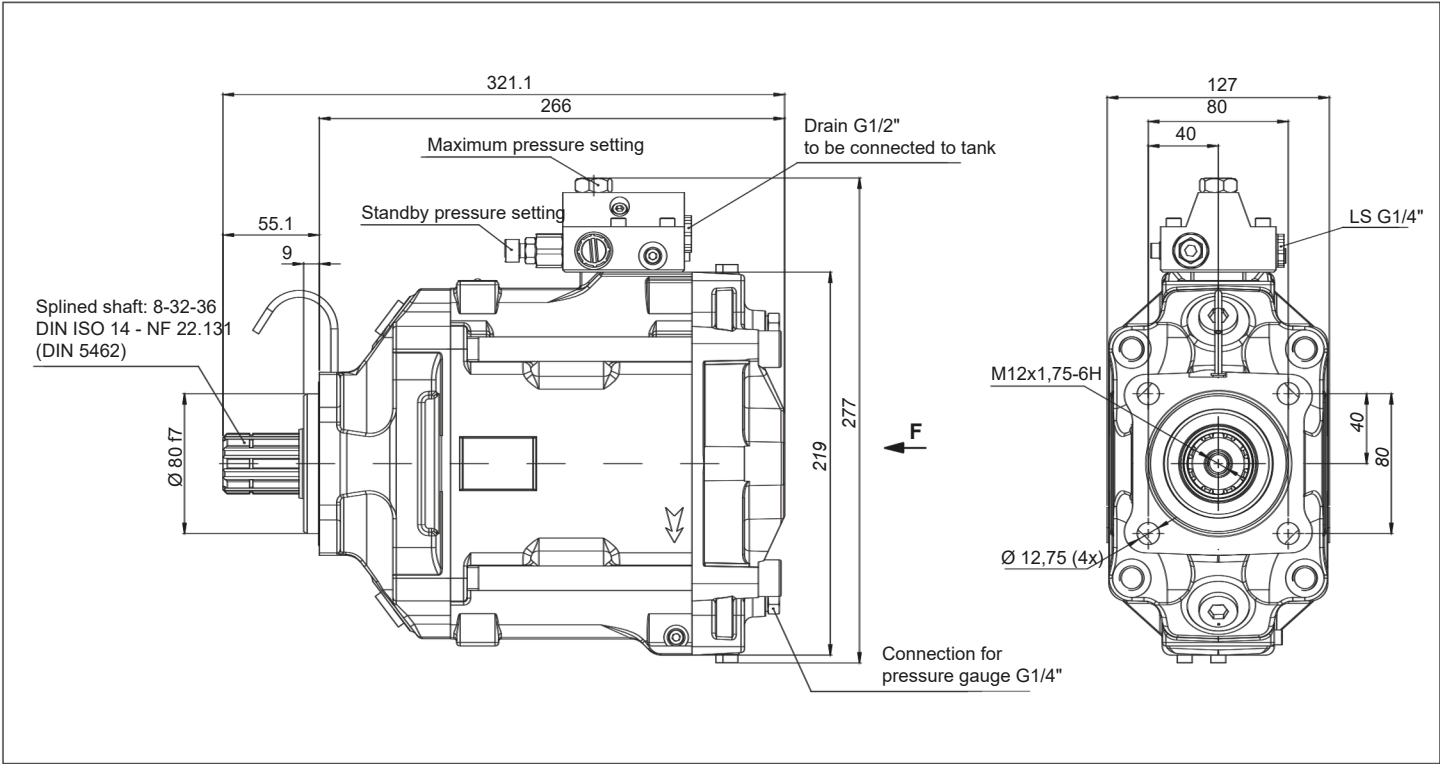


CW

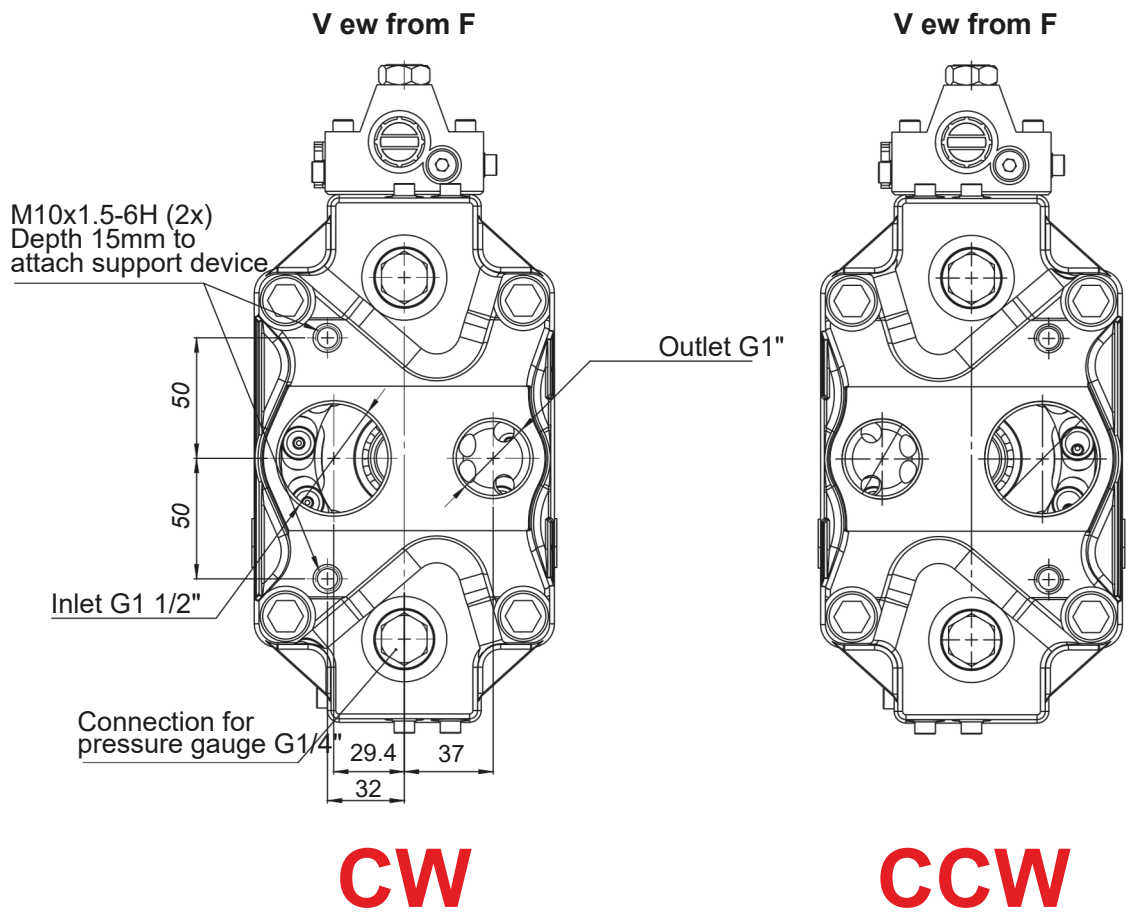
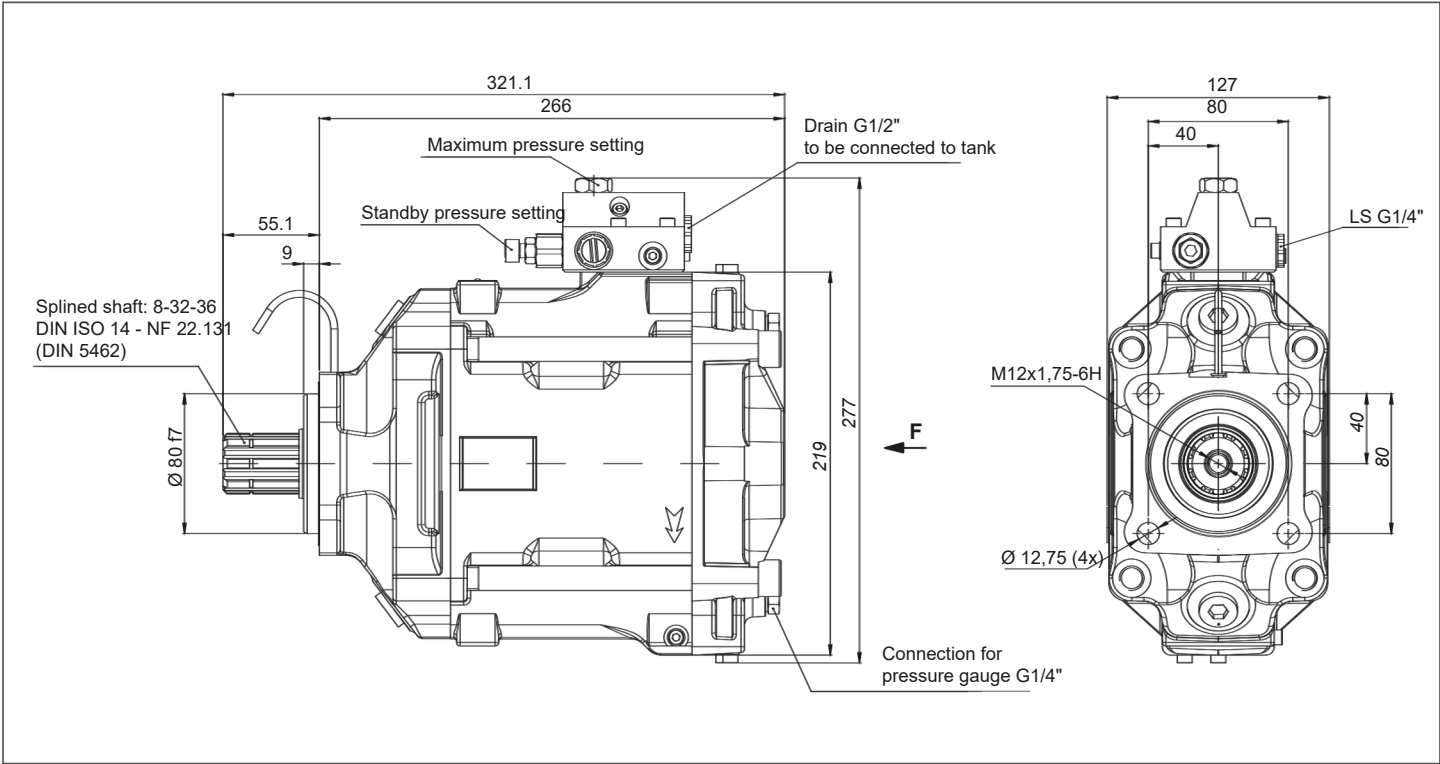


CCW

HXV - 130 cc Var able P ston Pump



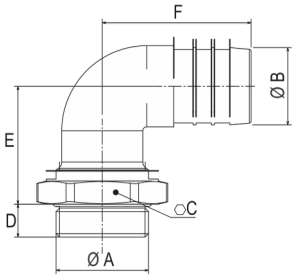
HXV - 150 cc Var able P ston Pump



Suction Fittings for HXV Hydraulic Pumps

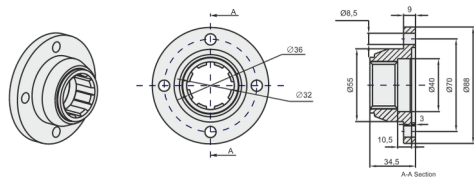
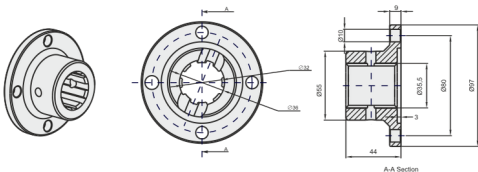
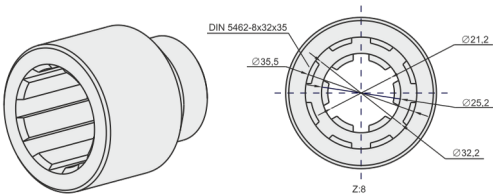
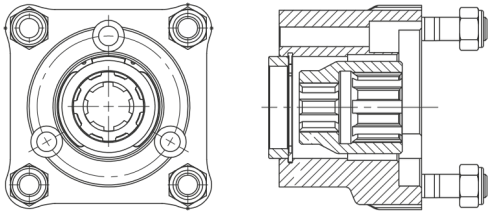
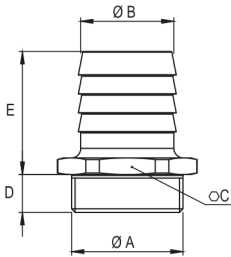
90° elbow fittings, swivel

Reference	A	Ø B	C	D	E	F	Pump type
90001	G 1 1/2"	40	60	17	61	77	variable
90002	G 1 1/2"	50	60	17	65	82	variable



Straight Fittings

Reference	A	Ø B	C	D	E	Pump type
50001	G 1 1/2"	40	55	16	52	variable
50002	G 1 1/2"	48	55	16	64	variable
50003	G 1 1/2"	60	65	16	67	variable
50004	G 1 1/2"	63.5	65	16	67	variable
50005	G 1 1/2"	76.2	80	16	87	variable



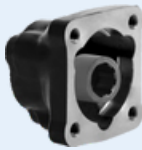
Inlet Fittings & Installation Parts

- Split Flange
- Seal
- Screw



By-Pass Valves

- 12 V
- 24 V



Hydraulic Adapters

- PTO Hydraulic Pump Adapter
- PTO Gear Pump Adapter
- Long / Short Adapter



Flanges

- 1120 (6 Spl ne)
- 1120 (8 Spl ne)
- 1300 (6 Spl ne)
- 1300 (8 Spl ne)



Couplers

- 6 x 8 Couplar
- 6 x 8 Couplar (Long)
- 8 x 8 Couplar
- 8 x 8 Couplar (Long)

HXV Var able D splacement Hydraul c P ston Pumps

Calculation of power to be supplied to the shaft as a function of flow and pressure

$$P = \frac{\Delta P \times Q}{600 \times \eta_{global}}$$

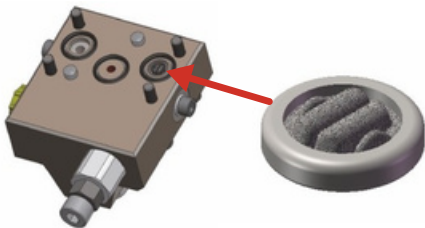
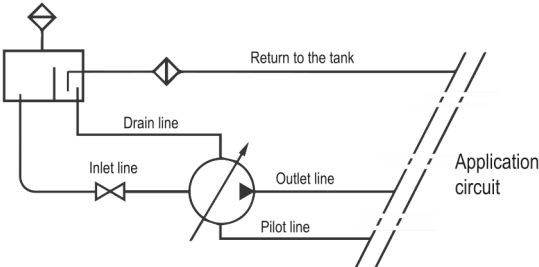
Calculation of torque to determine PTO,
as a function of the displacement and the pressure

$$C = \frac{Cyl \times \Delta P}{62.8 \times \eta_{meca}}$$

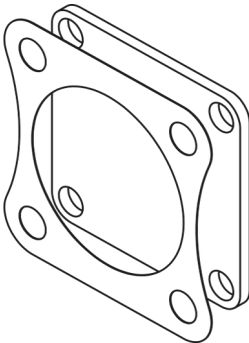
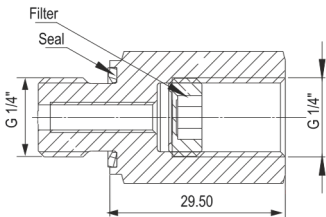
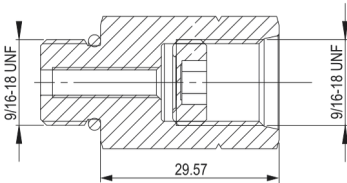
With:

- P = Hydraulic power in kW
- ΔP = Differential pressure in bar
- Q = Flow in l/min
- C = Torque in N.m
- Cyl = Displacement in cc/rev
- η_{meca} = Mechanical efficiency
- η_{global} = Mechanical efficiency + volumetric efficiency

Ideal installation



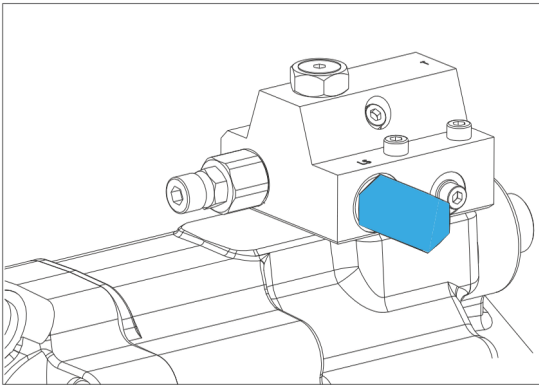
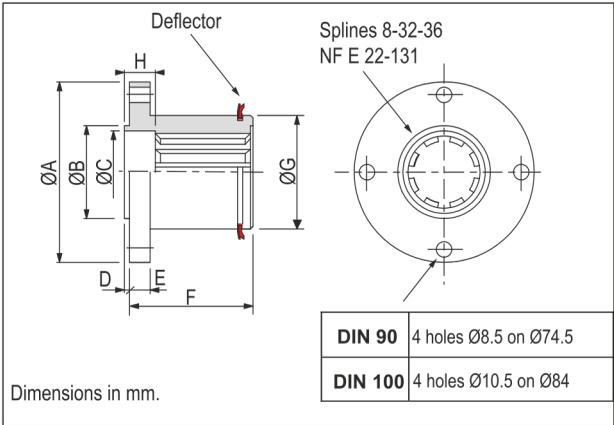
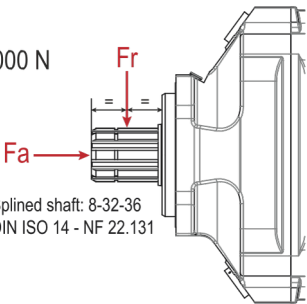
Type		ØA	ØB	C	D	E	F	ØG	H
DIN 90		90	47	43	2	10	62	55	15
DIN 100		100	57	43	2	10	64	55	15



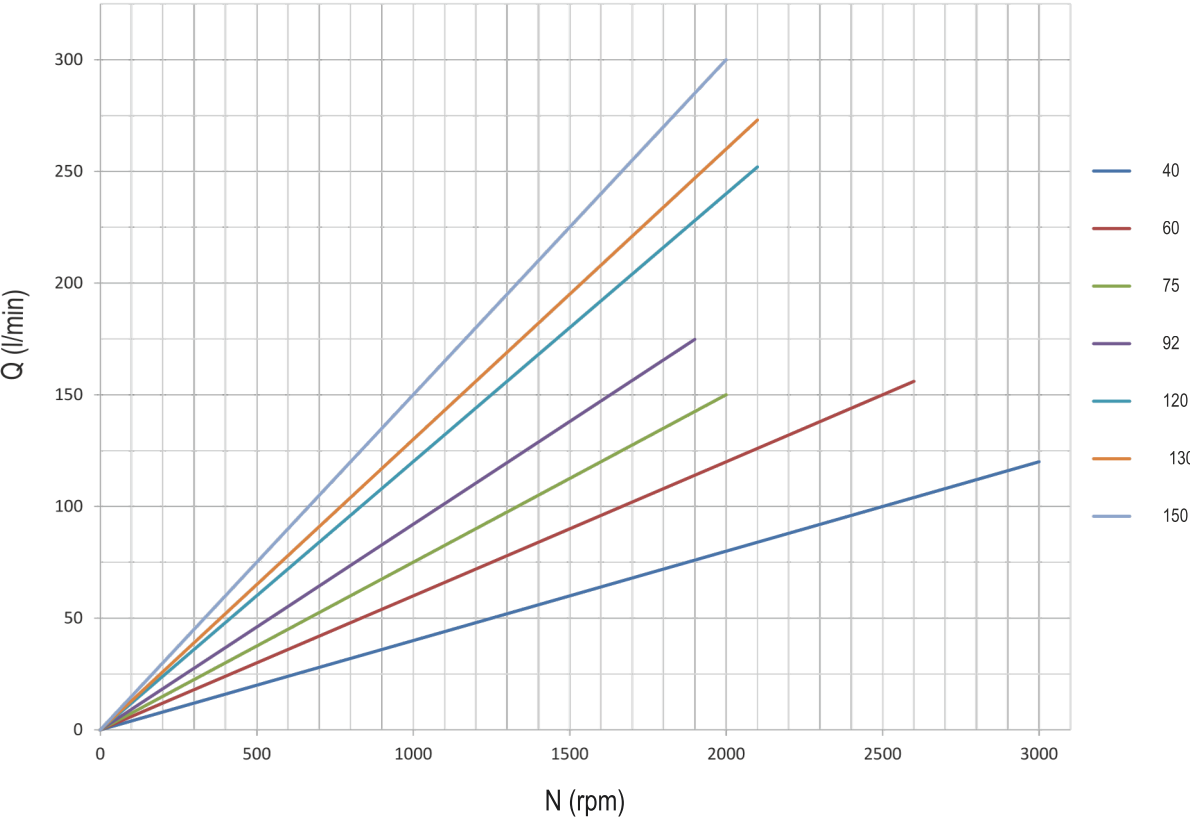
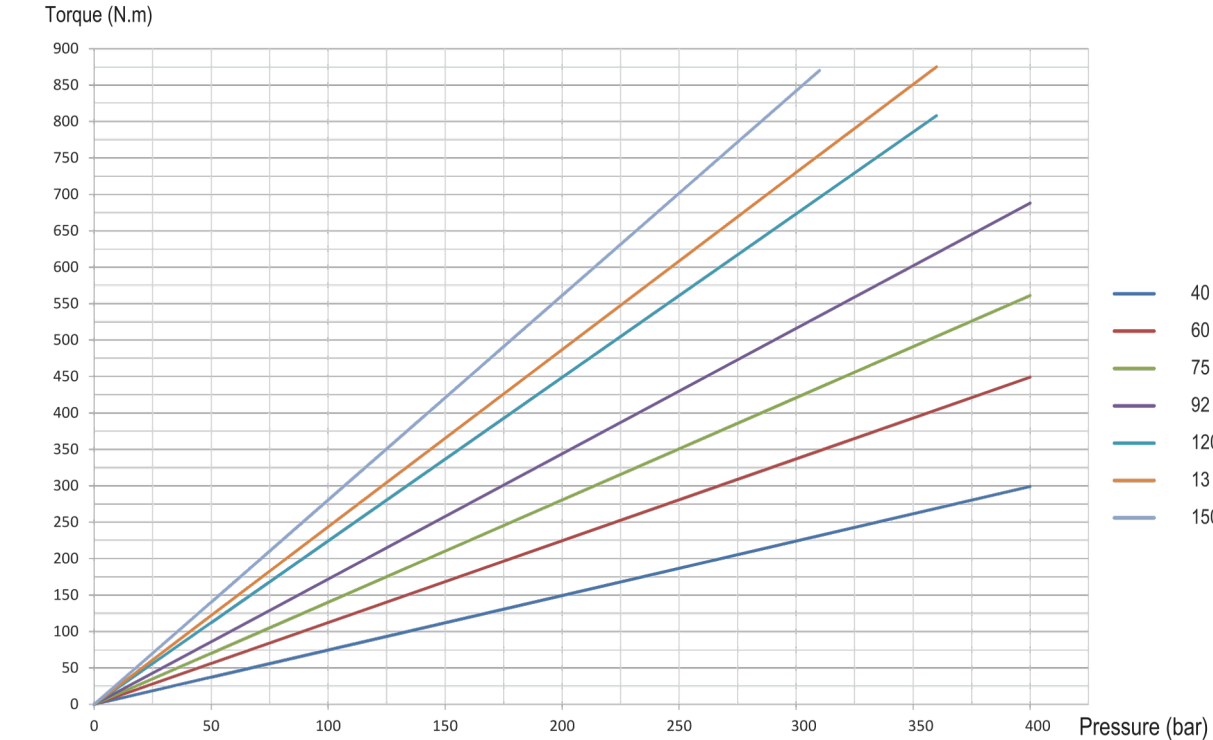
Force on pump shaft

Fr : Acceptable max. radial force = 3000 N

Fa : Acceptable axial force = 1600 N.



Torque and Flow

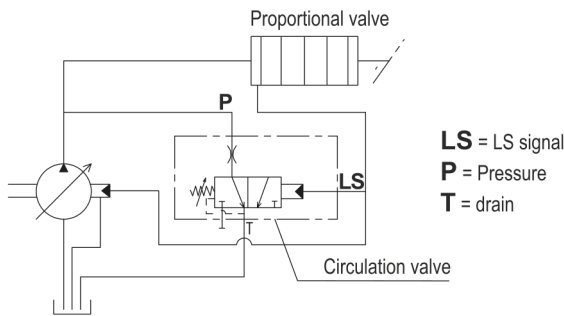
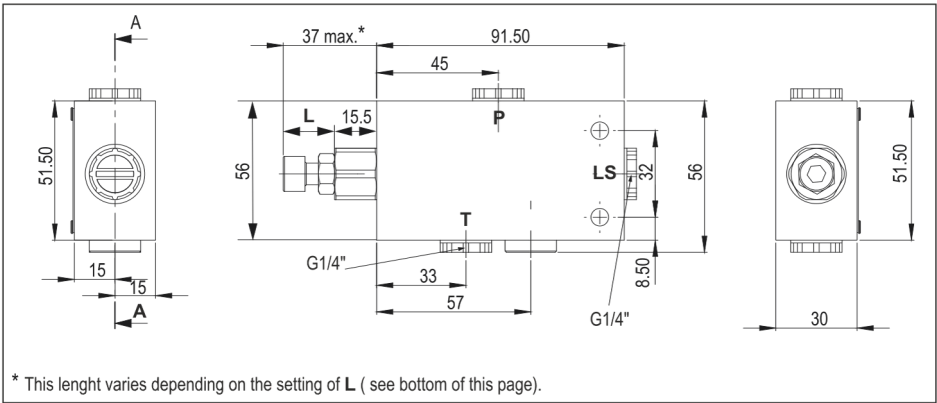
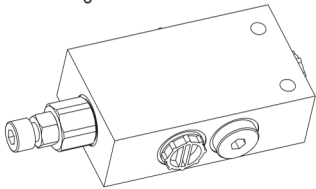


Accessories

FCV - FLUID VALVE CIRCULATION

The fluid circulation (FCV) is designed for applications where the hydraulic variable displacement pump is used in standby mode for a long period of time, for example engine PTO, to protect the pump against overheating.

- The valve flow varies between 20 and 22 l/min for a ΔP at 30 bar.
- Maximum pressure is 420 bar.
- The closing pressure is 2 bar min. and 7 bar max.



Setting of the control pressure

