



walvoil
MOTION BY PEOPLE

NEW

xtreme

2XP

Aluminium Gear Pump



**2XP
ALUMINIUM
GEAR PUMP**

- High efficiency
- Reduced number of components
- Reduced overall dimension
- Increased transmissible torque



Walvoil presents the new range of 2XP Pumps, with Aluminium body and Cast Iron flanges.

These pumps are particularly suitable for all applications where traditional Aluminium pumps are used at the limit of their performance; eg. for installation on mobile equipment intended for heavy duty operating cycles, where pressures or mechanical stresses are typically higher.

Its new modular construction ensures an increased versatility maintaining the same configurations of 2SP Series allowing new options.



WORKING CONDITIONS

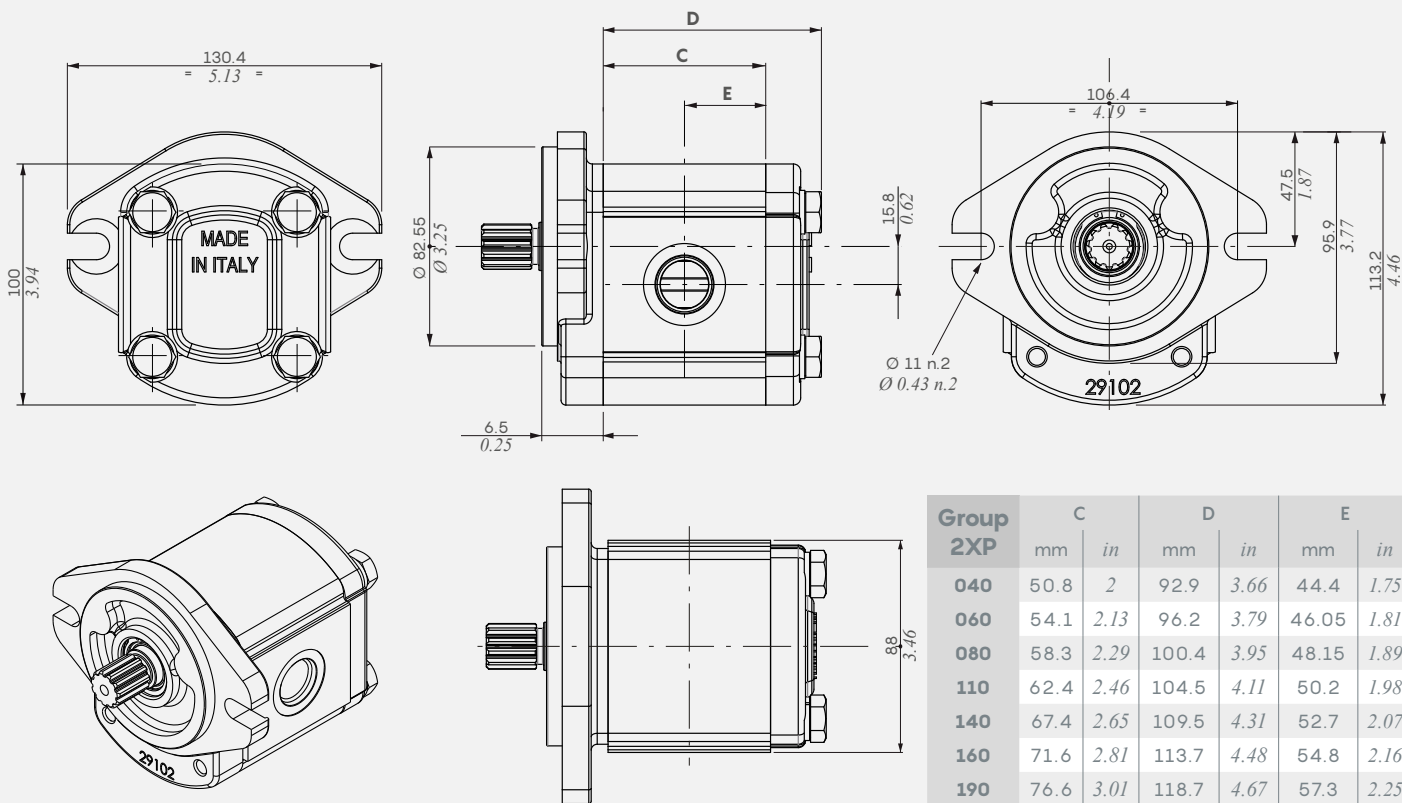
Displacement	from 4.1 to 31.5 cm ³ /rev from 0.25 to 1.92 in ³ /rev	
Max continuous pressure	Up to	250 bar 3600 psi
Fluid	hydraulic mineral oil-based	
Fluid temperature	With NBR (buna N) seals	from -20 to +80 °C from -4 to +176 °F
	With FPM (viton) seals	from -15 to +100 °C from +5 to +212 °F
Viscosity	Recommended	from 15 to 92 mm ² /s (cSt)
	Permitted for starting	2000 mm ² /s (cSt)
Max level of contamination	Recommended for operating pressure > 150 bar (2150 psi)	20/18/15 ISO 4406 class 9 (NAS 1638)
	Recommended for operating pressure < 150 bar (2150 psi)	21/18/15 ISO 4406 class 10 (NAS 1638)

Note: For motor configuration, please contact Sales Department.

TECHNICAL DATA

Group 2XP	Displacement		Max continuous pressure		Max intermittent pressure		Max peak pressure		Max rotation speed rpm
	cm ³ /rev	in ³ /rev	bar	psi	bar	psi	bar	psi	
040	4.1	0.25	250	3.600	270	3.900	290	4.200	4000
060	6.1	0.37	250	3.600	270	3.900	290	4.200	4000
080	8.7	0.53	250	3.600	270	3.900	290	4.200	3500
110	11.2	0.68	250	3.600	270	3.900	290	4.200	3500
140	14.2	0.86	250	3.600	270	3.900	290	4.200	3500
160	16.8	1.02	230	3.350	240	3.500	250	3.600	3500
190	19.8	1.20	210	3.050	220	3.200	230	3.350	3500
220	22.9	1.39	190	2.750	200	2.900	210	3.050	3000
260	26.4	1.61	170	2.450	180	2.600	190	2.750	3000
290	29.1	1.77	150	2.150	160	2.300	170	2.450	2500
310	31.5	1.92	130	1.850	140	2.000	150	2.150	2500

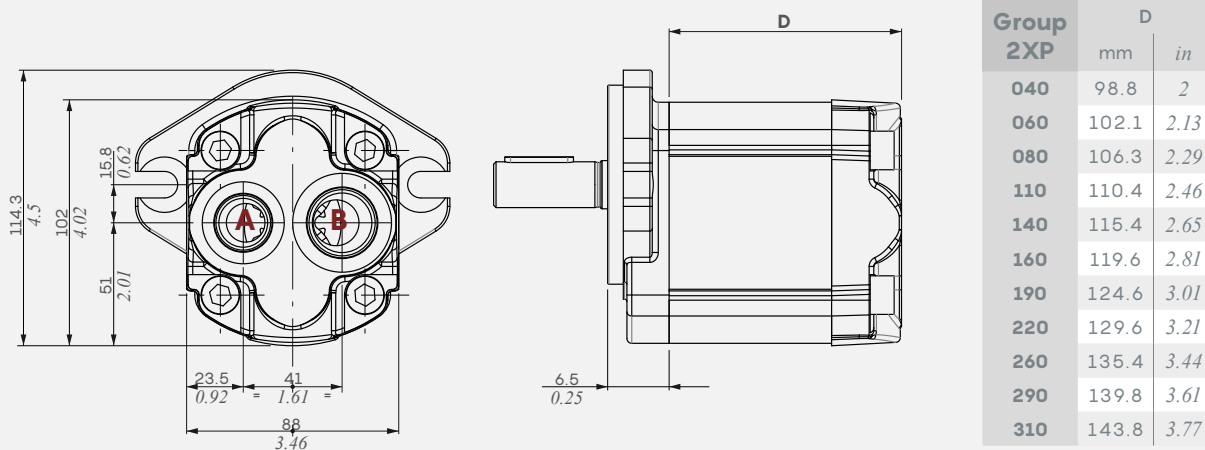
DIMENSIONAL DATA



Group 2XP	C		D		E	
	mm	in	mm	in	mm	in
040	50.8	2	92.9	3.66	44.4	1.75
060	54.1	2.13	96.2	3.79	46.05	1.81
080	58.3	2.29	100.4	3.95	48.15	1.89
110	62.4	2.46	104.5	4.11	50.2	1.98
140	67.4	2.65	109.5	4.31	52.7	2.07
160	71.6	2.81	113.7	4.48	54.8	2.16
190	76.6	3.01	118.7	4.67	57.3	2.25
220	81.6	3.21	123.7	4.87	59.8	2.35
260	87.4	3.44	129.5	5.09	62.7	2.47
290	91.8	3.61	133.9	5.27	64.9	2.55
310	95.8	3.77	137.9	5.43	66.9	2.63

The dimensional drawing represents the version with **SAEA** flange (for other flanges, see the next page).

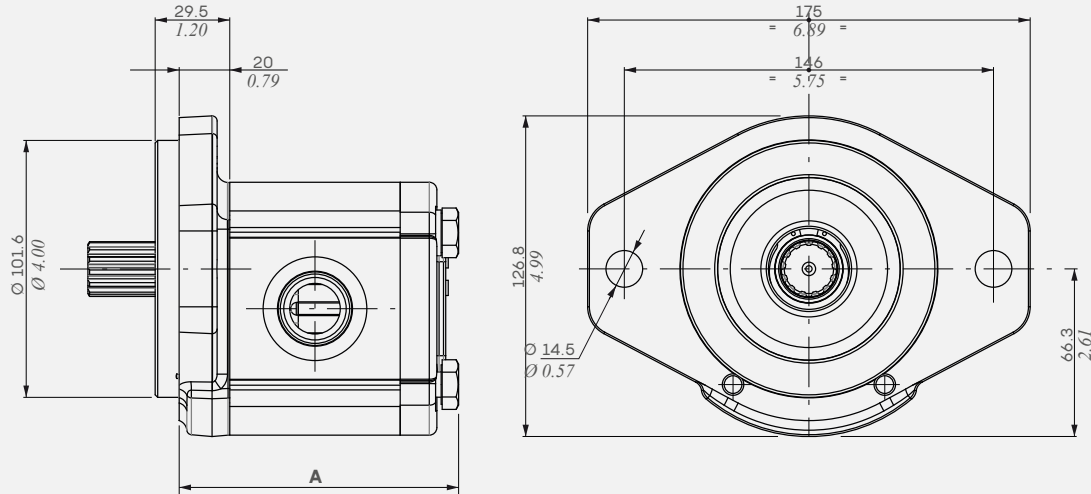
Cover with ports for rear connection



Note: The ports can be present both or individually, of the same or different sizes

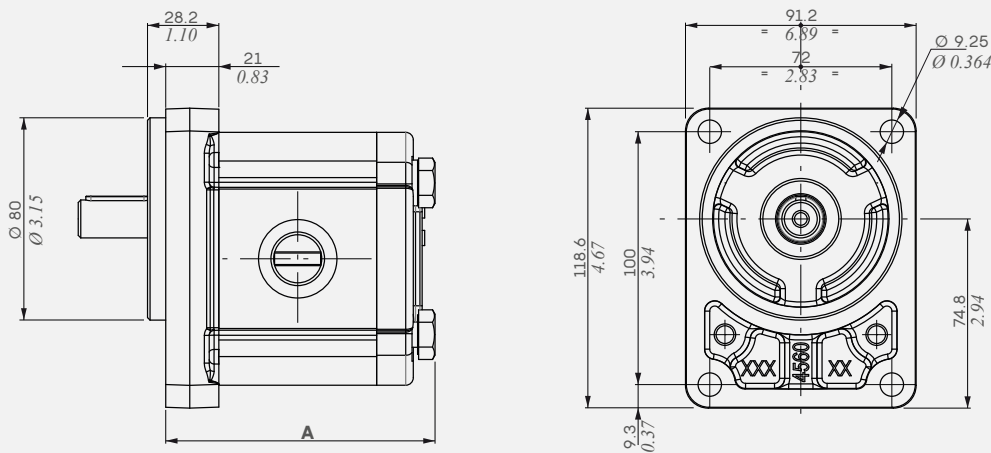
DIMENSIONAL DATA

Type SAEB flange (n. 2 holes)



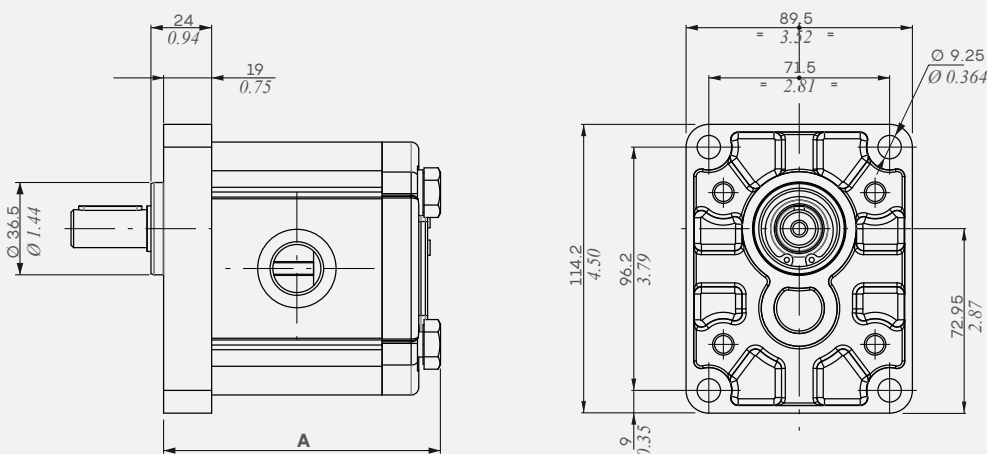
Group 2XP	A	
	mm	in
040	93.9	3.70
060	97.2	3.82
080	101.4	3.99
110	105.5	4.15
140	110.5	4.35
160	114.7	4.51
190	119.7	4.71
220	124.7	4.91
260	130.5	5.14
290	134.9	5.31
310	138.9	5.47

Type B80C flange



Group 2XP	A	
	mm	in
040	94.9	3.74
060	98.2	3.87
080	102.4	4.03
110	106.5	4.19
140	111.5	4.39
160	115.7	4.55
190	120.7	4.75
220	125.7	4.95
260	131.5	5.18
290	135.9	5.35
310	139.9	5.50

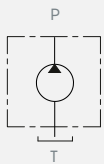
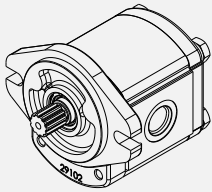
Type EUR flange



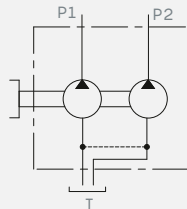
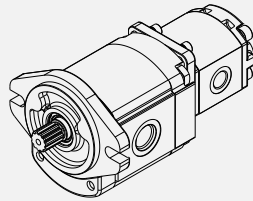
Group 2XP	A	
	mm	in
040	92.9	3.66
060	96.2	3.79
080	100.4	3.95
110	104.5	4.11
140	109.5	4.31
160	113.7	4.48
190	118.7	4.67
220	123.7	4.87
260	129.5	5.10
290	133.9	5.27
310	137.9	5.43

CONFIGURATIONS

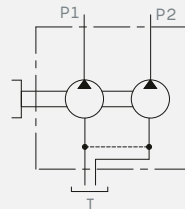
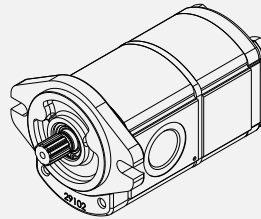
Single pump
2XP



Double pump
2XP + 1SP

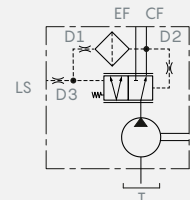
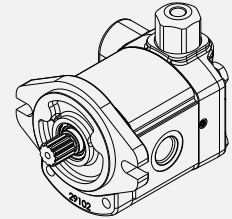


Double pump
2XP + 2XP



Single pump with back cover with auxiliary function:

2XP + AUX



Note: For separate stage solutions please contact Sales Department

Connection position			
0	1	3	4

Clockwise rotation - **D**
 Anti-clockwise rotation - **S**

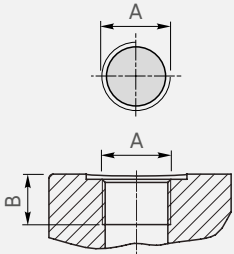
Auxiliary valves available	
VLPI	Pressure relief valve (internal drain)
VLPE	Pressure relief valve (external drain)
VRF	Flow regulator
VRFVLPI	Flow divider and relief valve
UNLD	Unloading valve
CP (LS)	Priority valve

Portings and connections	porting type				
	G	U	T	N	F
0	●	●	●	●	●
1	●	●	-	-	-
3	●	●	-	-	-
4	●	●	-	-	-

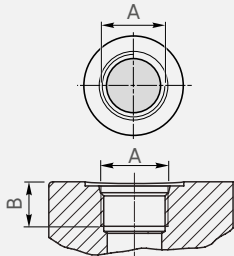
(-): For available connection, please contact our Sales Dpt.

PORTS AND CONNECTIONS

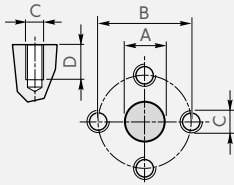
G: BSP



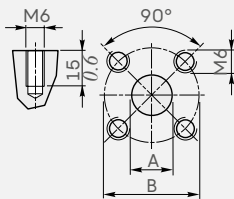
U: UN-UNF



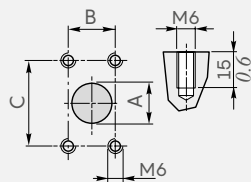
N: European flange



T: German flange



F: SAE J518-1 connection



Group 2XP	Port Threading											
	G (BSP)						U (UN-UNF)					
	A		IN		OUT		A		IN		OUT	
	IN	OUT	mm	in	mm	in	IN	OUT	mm	in	mm	in
040	G 1/2"	G 1/2"	16	0.63	16	0.63	SAE10	SAE10	17	0.67	17	0.67
060	G 1/2"	G 1/2"	16	0.63	16	0.63	SAE10	SAE10	17	0.67	17	0.67
080	G 1/2"	G 1/2"	16	0.63	16	0.63	SAE10	SAE10	17	0.67	17	0.67
110	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
140	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
160	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
190	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
220	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
260	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
290	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
310	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67

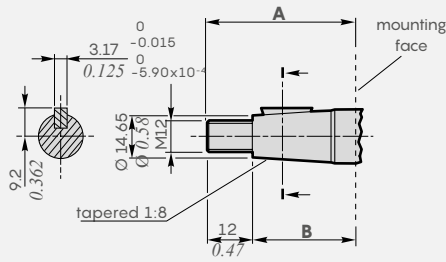
Group 2XP	Port Threading																					
	N (EUROPEAN)								T (GERMAN)													
	A		B		C		D		A		B		B									
	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT	IN	OUT	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT								
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in								
040	13	0.51	13	0.51	30	1.18	30	1.18	M6	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
060	13	0.51	13	0.51	30	1.18	30	1.18	M6	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
080	13	0.51	13	0.51	30	1.18	30	1.18	M6	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
110	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
140	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
160	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
190	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
220	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
260	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
290	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
310	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	14	0.55	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38

Group 2XP	Port Threading											
	F (SAE J518-1 connection)											
	A				B				C			
	Ø IN	Ø OUT	mm	in	Ø IN	Ø OUT	mm	in	Ø IN	Ø OUT	mm	in
040	20	0.79	15	0.59	17.4	0.69	17.4	0.69	38	1.50	38	1.50
060	20	0.79	15	0.59	17.4	0.69	17.4	0.69	38	1.50	38	1.50
080	20	0.79	15	0.59	17.4	0.69	17.4	0.69	38	1.50	38	1.50
110	20	0.79	15	0.59	17.4	0.69	17.4	0.69	38	1.50	38	1.50
140	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
160	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
190	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
220	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
260	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
290	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
310	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50

SHAFT TYPES

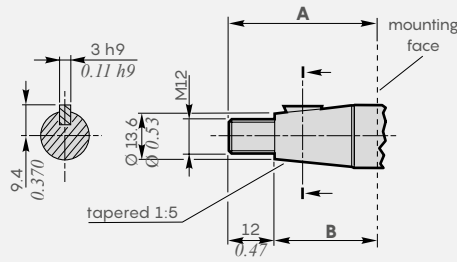
Type 10

Torque 140 Nm - 103 lbft



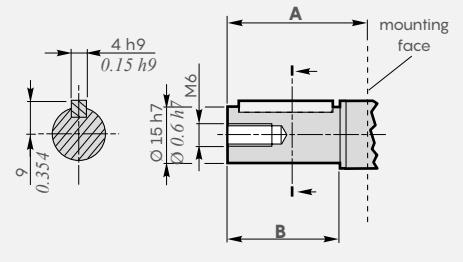
Type 11

Torque 140 Nm - 103 lbft



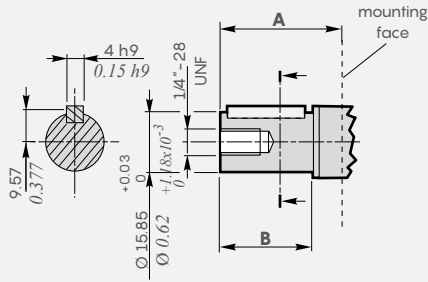
Type 12

Torque 80 Nm - 59 lbft



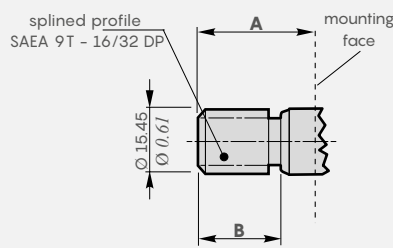
Type 13

Torque 90 Nm - 66 lbft



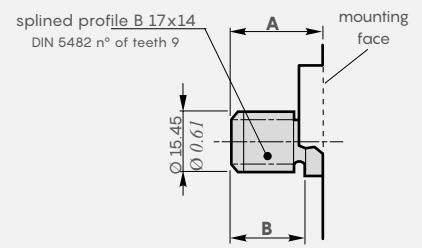
Type 14

Torque 100 Nm - 74 lbft



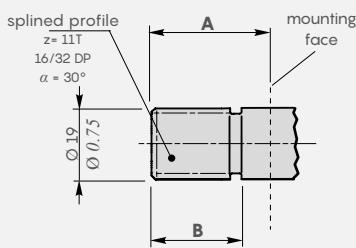
Type 15

Torque 100 Nm - 74 lbft



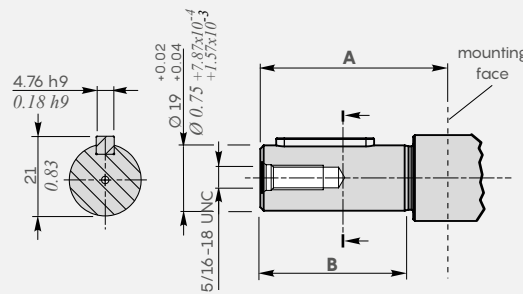
Type 30

Torque 150 Nm - 110 lbft



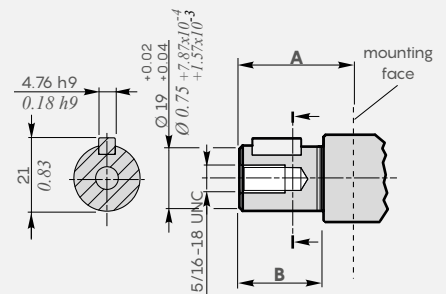
Type 31

Torque 140 Nm - 103 lbft



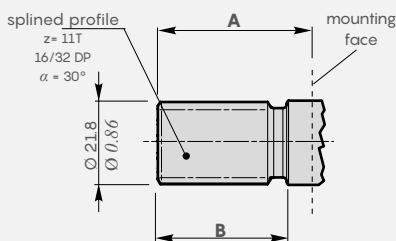
Type 32

Torque 110 Nm - 81 lbft



Type 45*

Torque 280 Nm - 207 lbft



Note(*): Only for pump with SAEB flange

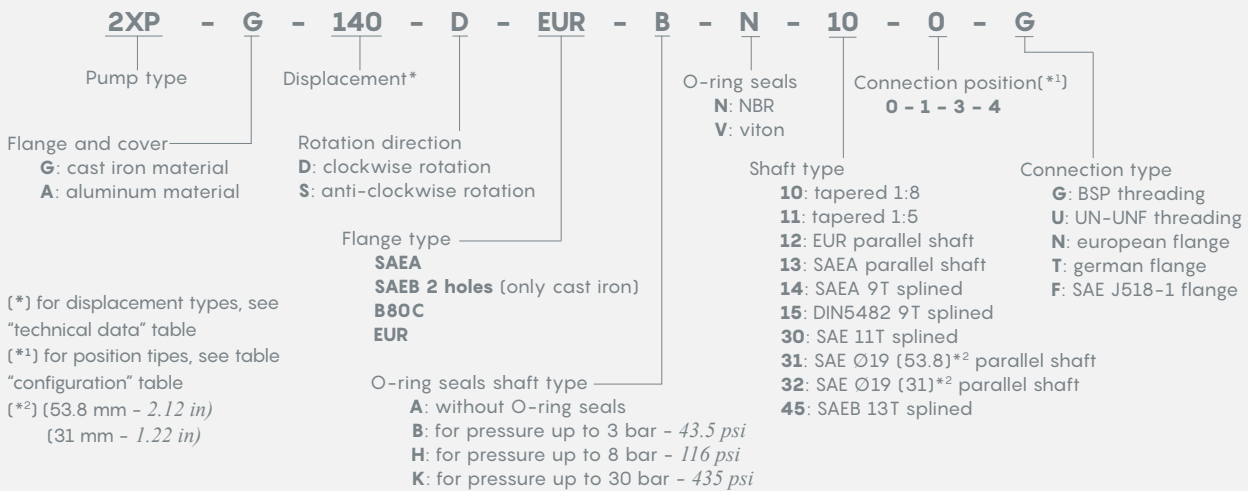
Type	Shaft dimensions											
	EUR - SAEA				SAEB				B80C			
	A	B	A	B	A	B	A	B	A	B	A	B
10	39.5	27.5	1.56	1.08	-	-	-	-	37.5	25.5	1.48	1.00
11	39.5	27.5	1.56	1.08	-	-	-	-	37.5	25.5	1.48	1.00
12	36.5	30	1.44	1.18	-	-	-	-	34.5	30	1.36	1.18
13	32	24	1.26	0.94	-	-	-	-	30	24	1.18	0.94
14	31.5	23	1.24	0.91	-	-	-	-	29.5	23	1.16	0.91
15	26	20	1.02	0.79	-	-	-	-	24	20	0.94	0.79
30	31.5	23.8	1.24	0.94	-	-	-	-	-	-	-	-
31	53.8	44.5	2.12	1.75	-	-	-	-	-	-	-	-
32	31	24	1.22	0.94	-	-	-	-	-	-	-	-
45*	-	-	-	-	41.2	34	1.62	1.34	-	-	-	-

SHAFT - FLANGE COMBINATION

Group 2XP	Shaft type									
	10 Tapered 1:8	11 Tapered 1:5	12 EUR parallel shaft	13 SAEA parallel shaft	14 SAEA 9T splined	15 DIN5482 9T (26/24) splined	30 SAE 11T splined	31 SAE Ø19 (53.8 mm - 2.12 in) parallel shaft	32 SAE Ø19 (31 mm - 1.22 in) parallel shaft	45 SAEB 13T splined
SAEA	●	●	●	◇	◇	●	◇	◇	●	-
SAEB 2F	●	●	●	●	●	●	-	-	-	◇
B80C	●	◇	◇	●	●	◇	-	-	-	-
EUR	◇	●	◇	●	●	●	-	-	-	-

◇ = STANDARD COMBINATION
● = AVAILABLE COMBINATION

DESCRIPTION COMPOSITION



2XP+2XP configuration example

