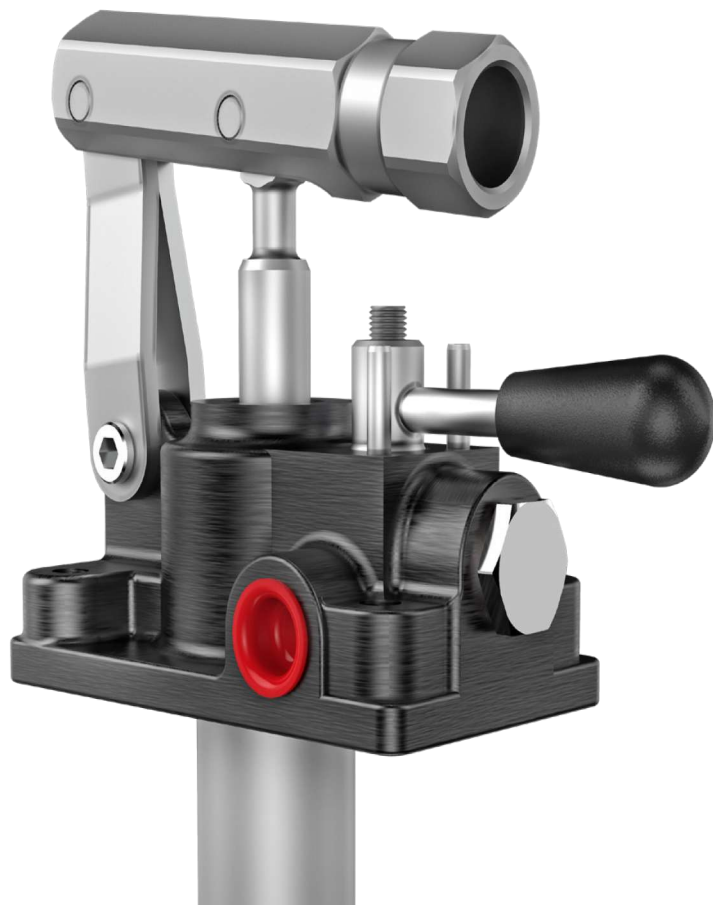


ORV
HP





CONTENTS

Working Conditions	495
Dimensional Data	496
Ordering Codes TE Model	501
Ordering Codes CE Model	502
Ordering Codes KCE Model	503
Part List	504
Technical Data	505

Additional Informations

Note: This catalog shows the product in the most standard configurations. For Other Configurations, more detailed information or special request, Please contact Customer Service Dpt.

Warning!: All specifications of this catalog refer to the standard product at this date (03/2013). ORVAL, oriented to a continuous improvement, reserves the right to discontinue, modify or revise the specifications, without notice.

ORVAL IS NOT RESPONSIBLE FOR ANY DAMAGE CAUSED BY AN INCORRECT USE OF THE PRODUCT.

WORKING CONDITIONS

MODEL	TE - 25	CE - 25	KCE - 25
Nominal Flow Displacement - Totally	25 cc/cycle - 0,007 U.S.G./cycle		
- Pull Direction	14,5 cc/cycle - 0,004 U.S.G./cycle		
- Push Direction	10,5 cc/cycle - 0,003 U.S.G./cycle		
Maximum Operating Pressure	300 Bar - 4400 PSI		
Weight	3,2 Kg-7,05 lbs	3,2 Kg-7,05 lbs	3,2 Kg-7,05 lbs
Oil Temperature with NBR Seals	-20 to 80 C° (-4 to 176 F°)		
with FPM (Viton) Seals	-20 to 100 C° (-4 to 212 F°)		
Oil Viscosity - Operating Range Minimum / Maximum	From 10 to 75 mm ² /s - 10 / 400 mm ² /s From 10 to 75 cSt - 10 / 400 cSt		
Oil Filtration	≤30 μ		
Ambiant Temperature Range	-35 to 60 C° (-31 to 140 F°)		
Internal Leakage (at 100 bar (1450 PSI), 40C° (110 F°), 46 cSt - A(B)-T)	3 cm ³ /min		
Max. Level Of Contamination	19/16 - ISO 4406		

Not: This catalogue shows technical specifications measured with mineral oil of 46 mm²/s-46 cSt viscosity at 40 C° temperature.

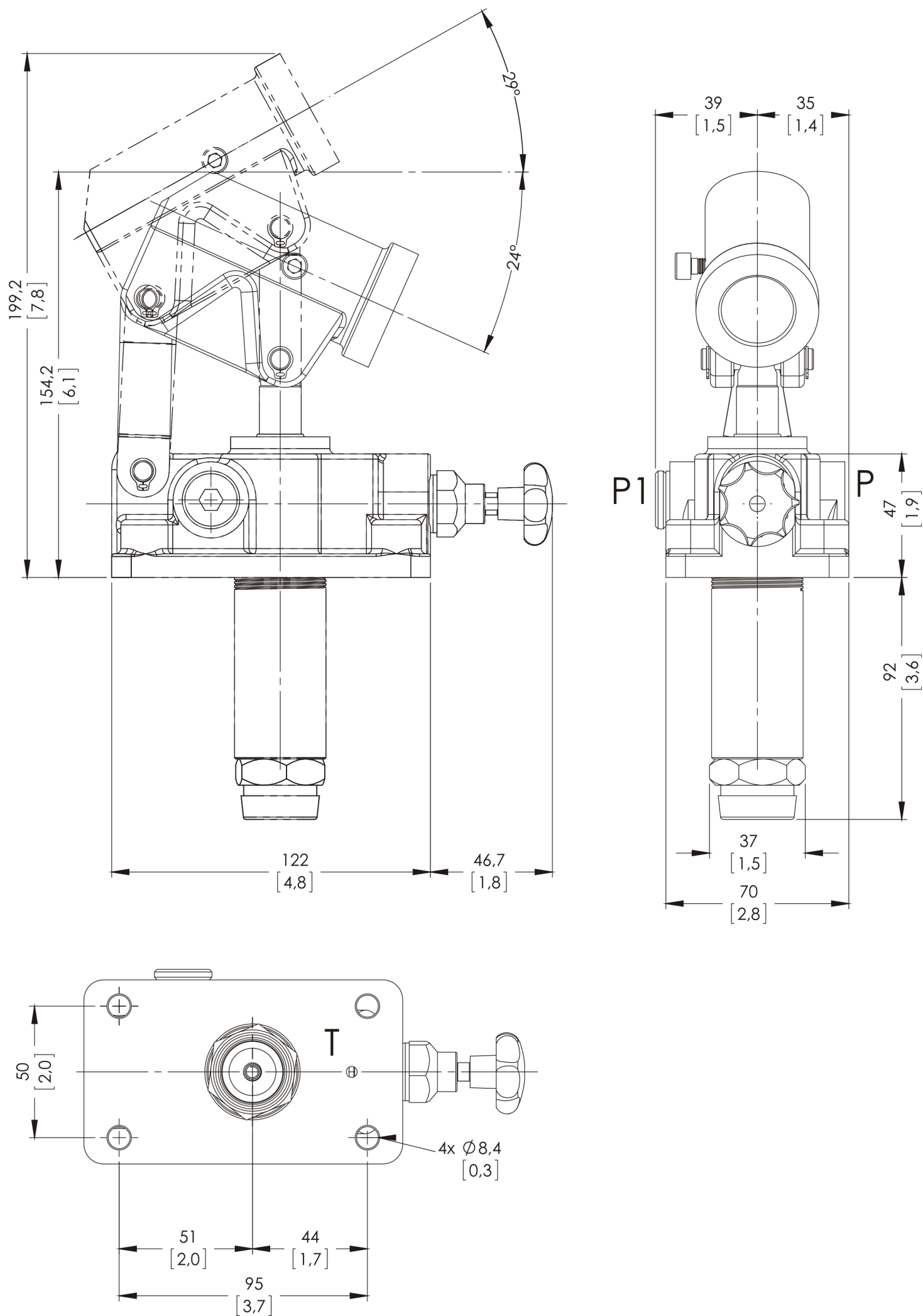
Double acting hand pumps suitable to operate single acting applications. They can be fitted also onto tank and are equipped with tapered lowering valve. They are available with nodular cast-iron body and nickel-plated spool.

PORTS THREADS AND STANDARD THREADS

MODEL	BSP (Iso 228)	UN-UNF (Iso 11926-1)	Metric (Iso 262)
TT-25	G 3/8"	3/4 - 16 UNF	M22x1.5
TC-25	G 3/8"	3/4 - 16 UNF	M22x1.5
CT-25	G 1/4"	3/4 - 16 UNF	M22x1.5
CC-25	G 1/4"	3/4 - 16 UNF	M22x1.5
RTC-25	G 3/8"	3/4 - 16 UNF	M22x1.5

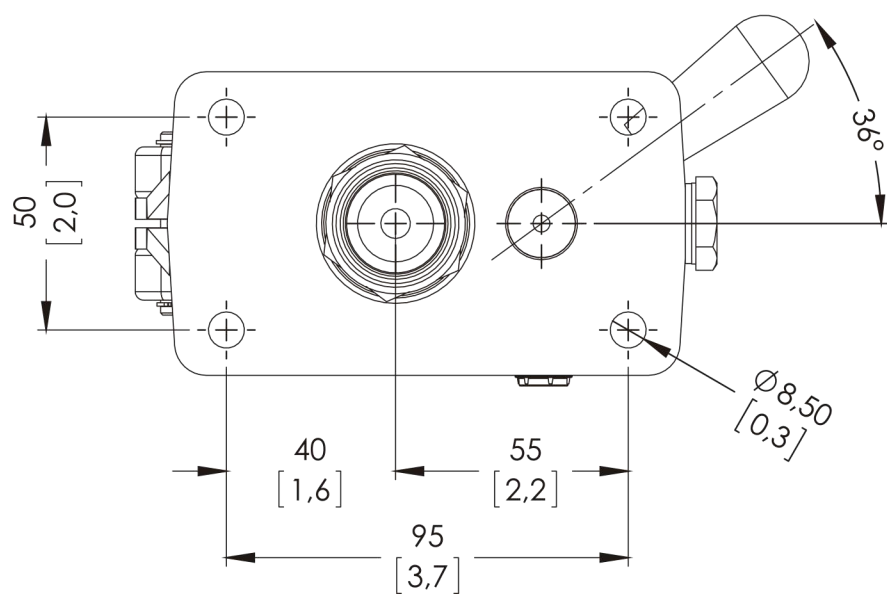
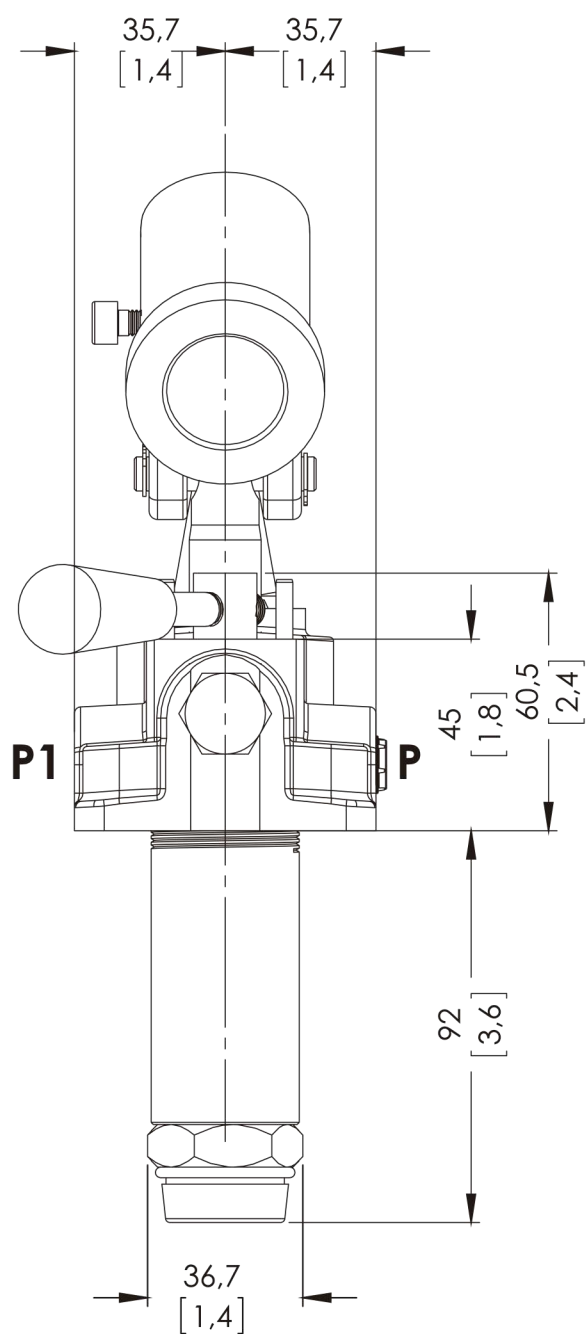
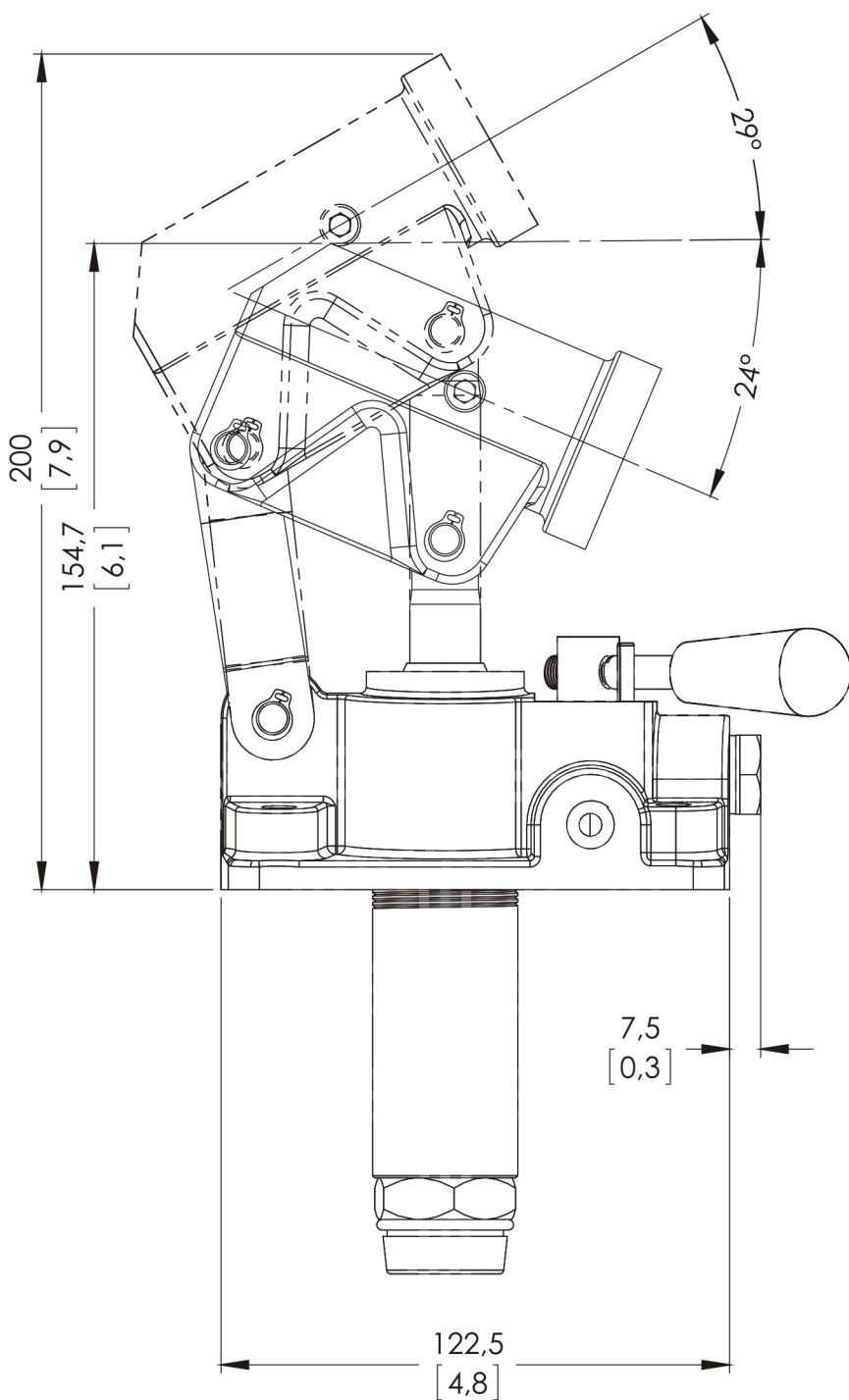
DIMENSIONAL DATA

TT 25 - TC 25 - Single Action Hand Pump

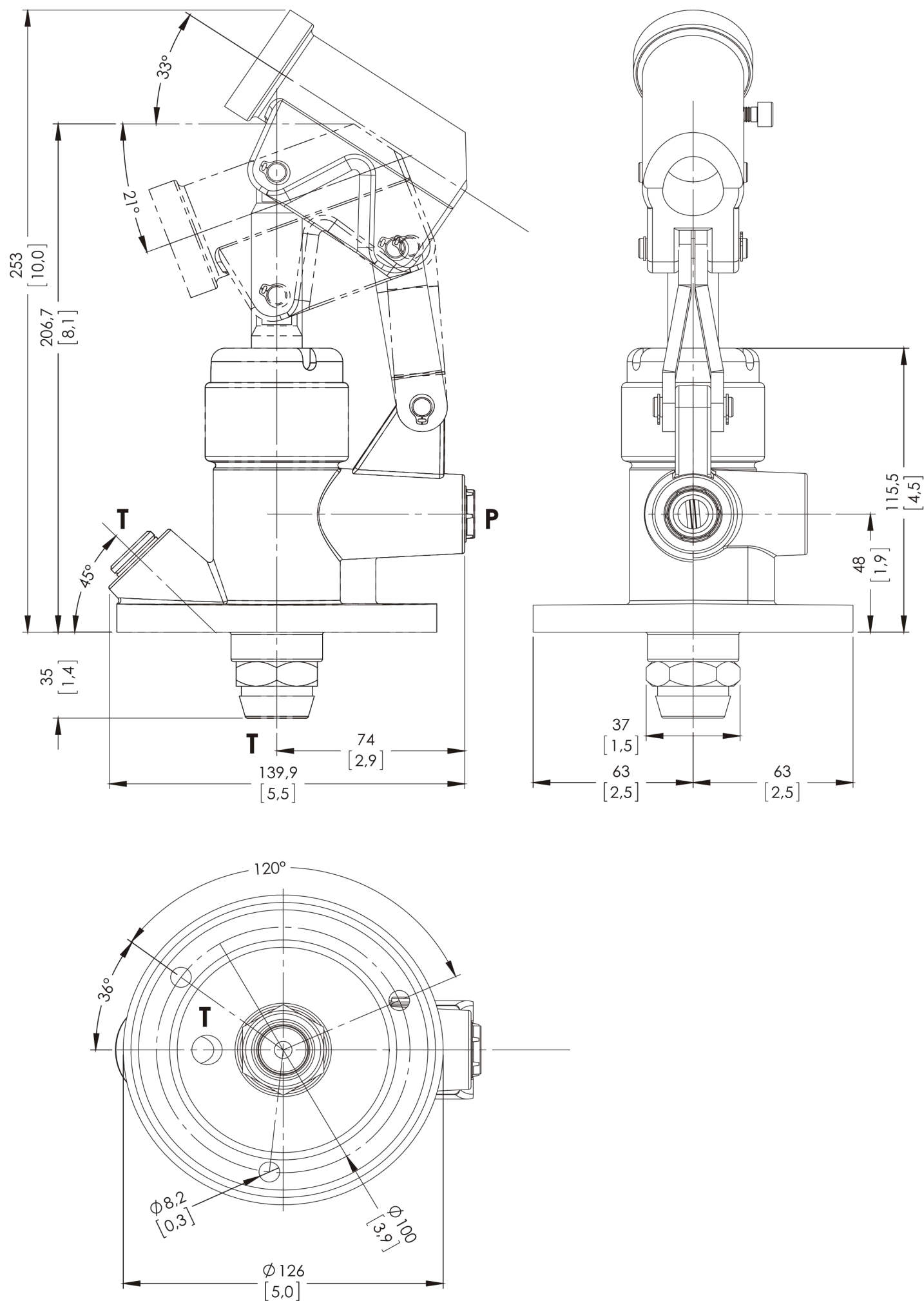


DIMENSIONAL DATA

CC 25 - CT 25 - Double Action Hand Pump

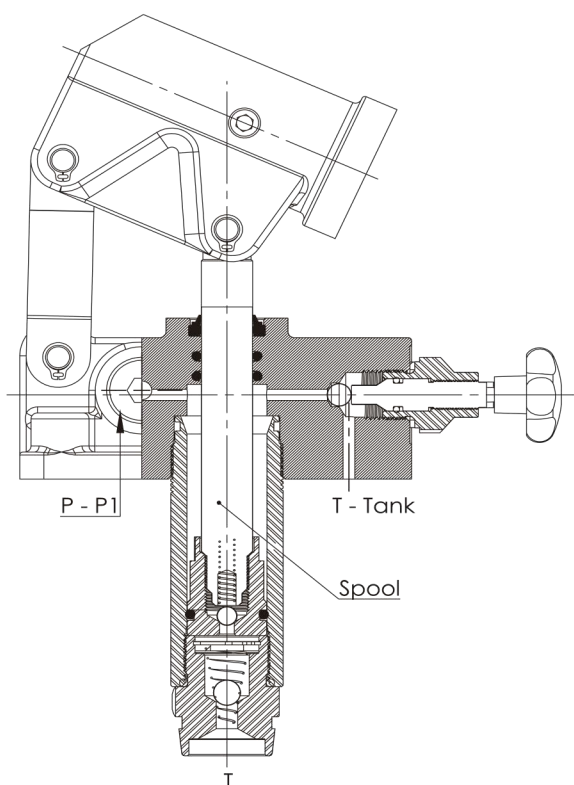


RTC 25 - Single Action Hand Pump With Round Type

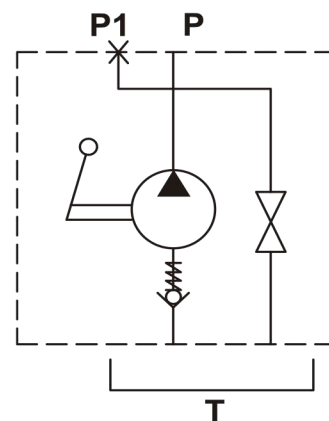


TT 25 - TC 25 - Single Action Hand Pump

Sectional Appearance

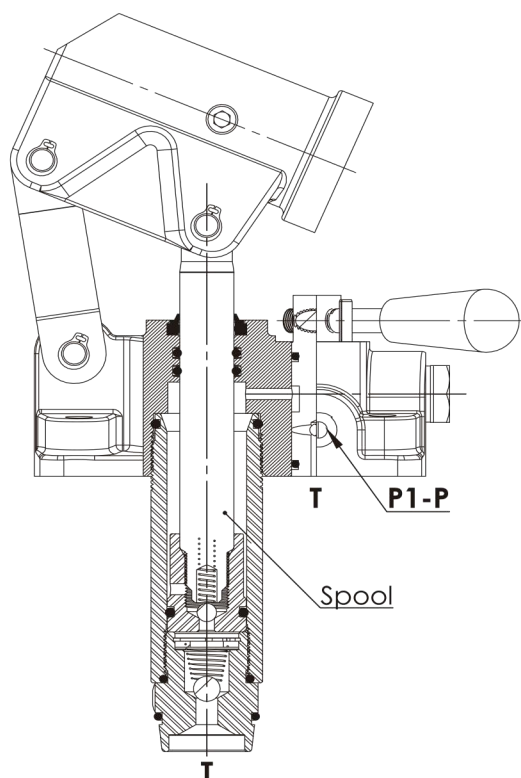


Diagram

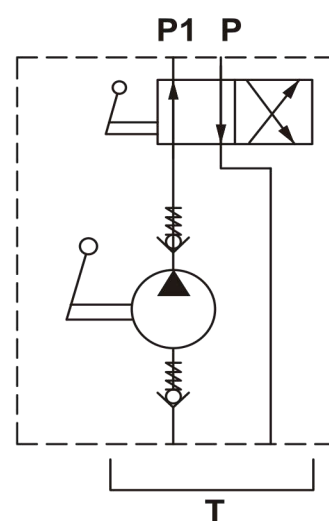


CC 25 - CT 25 - Double Action Hand Pump

Sectional Appearance



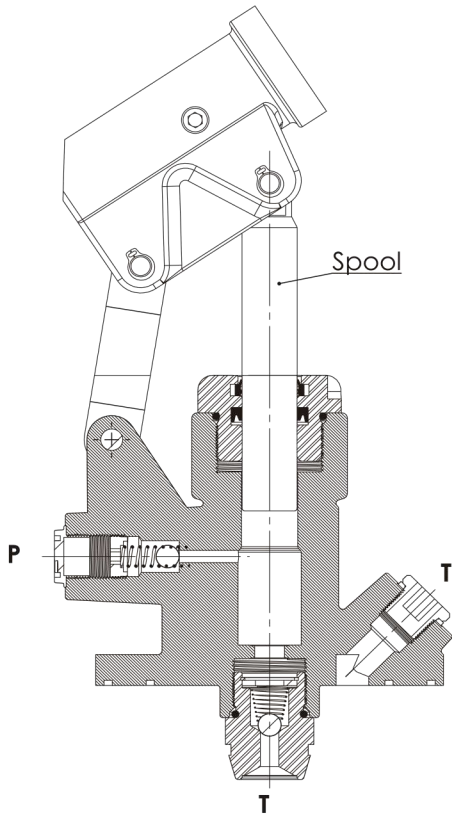
Diagram



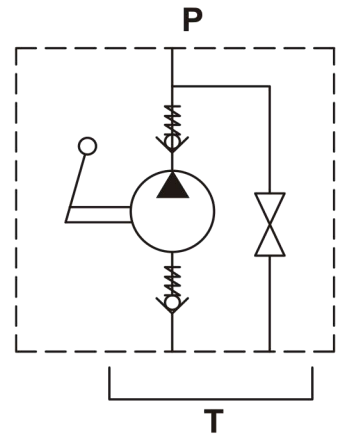
HYDRAULIC CIRCUIT

RTC 25 - Single Action Hand Pump With Round Type

Sectional Appearance

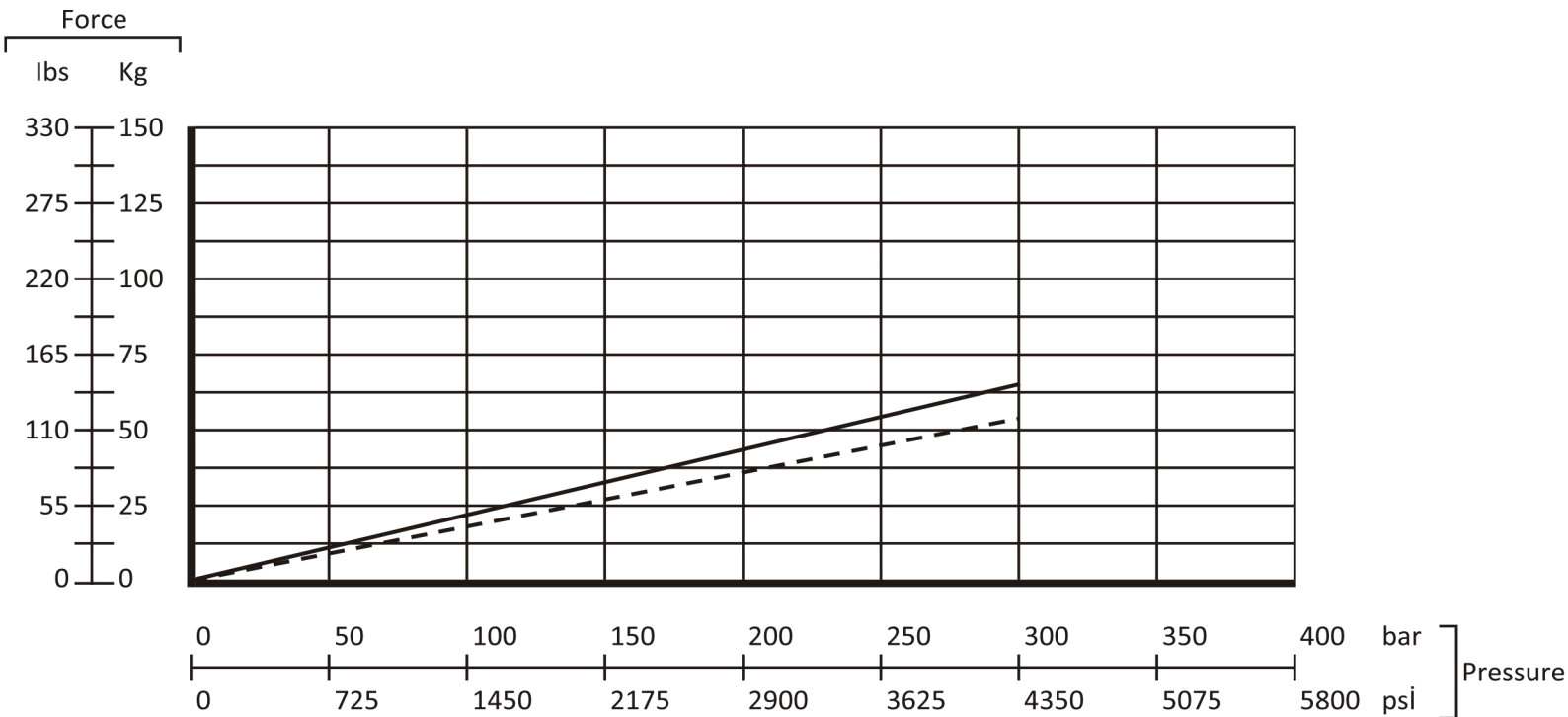


Diagram



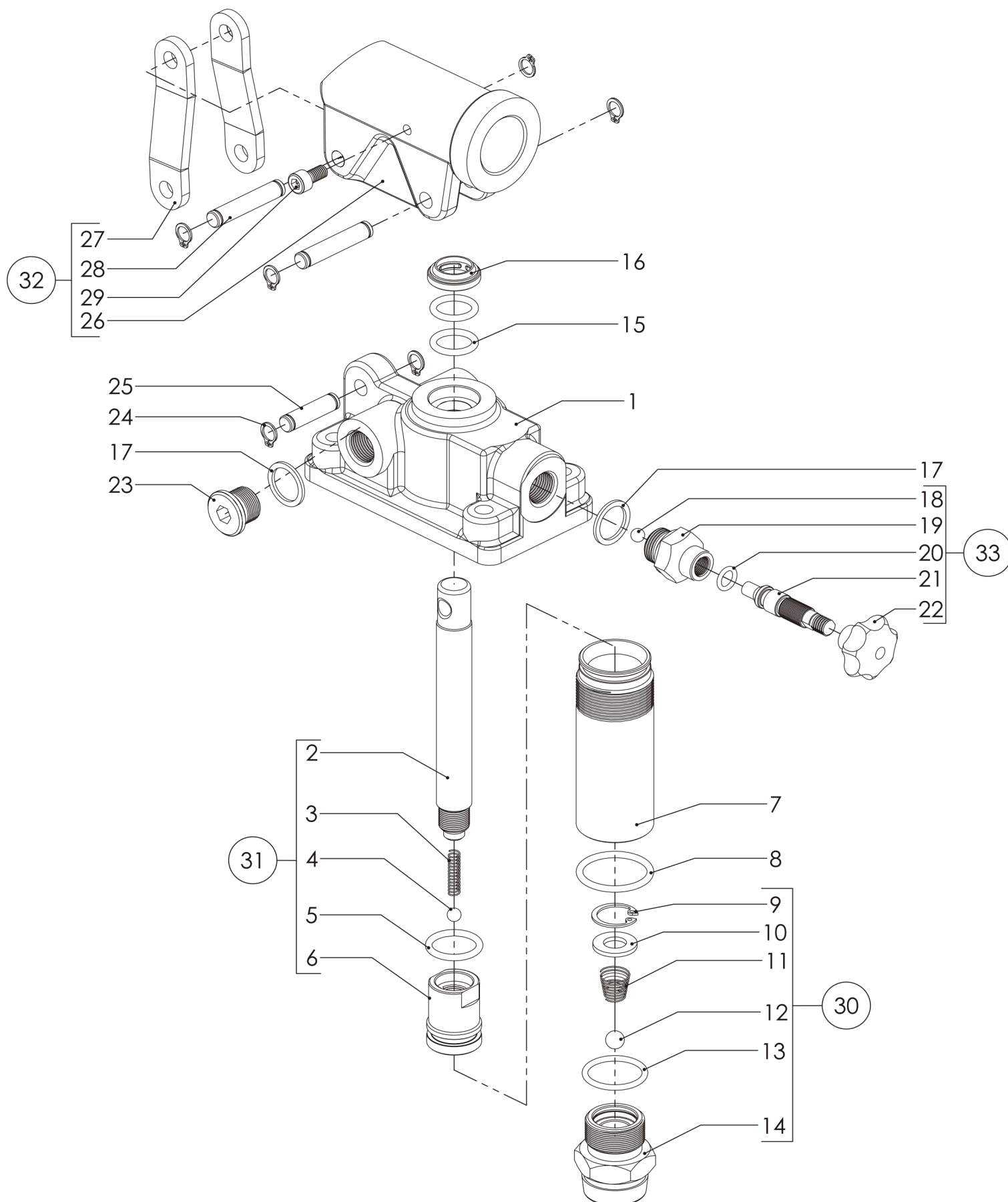
Performance Data and Curve

Force while pumping with standard lever (600 mm); Force and pressure table



Order Example

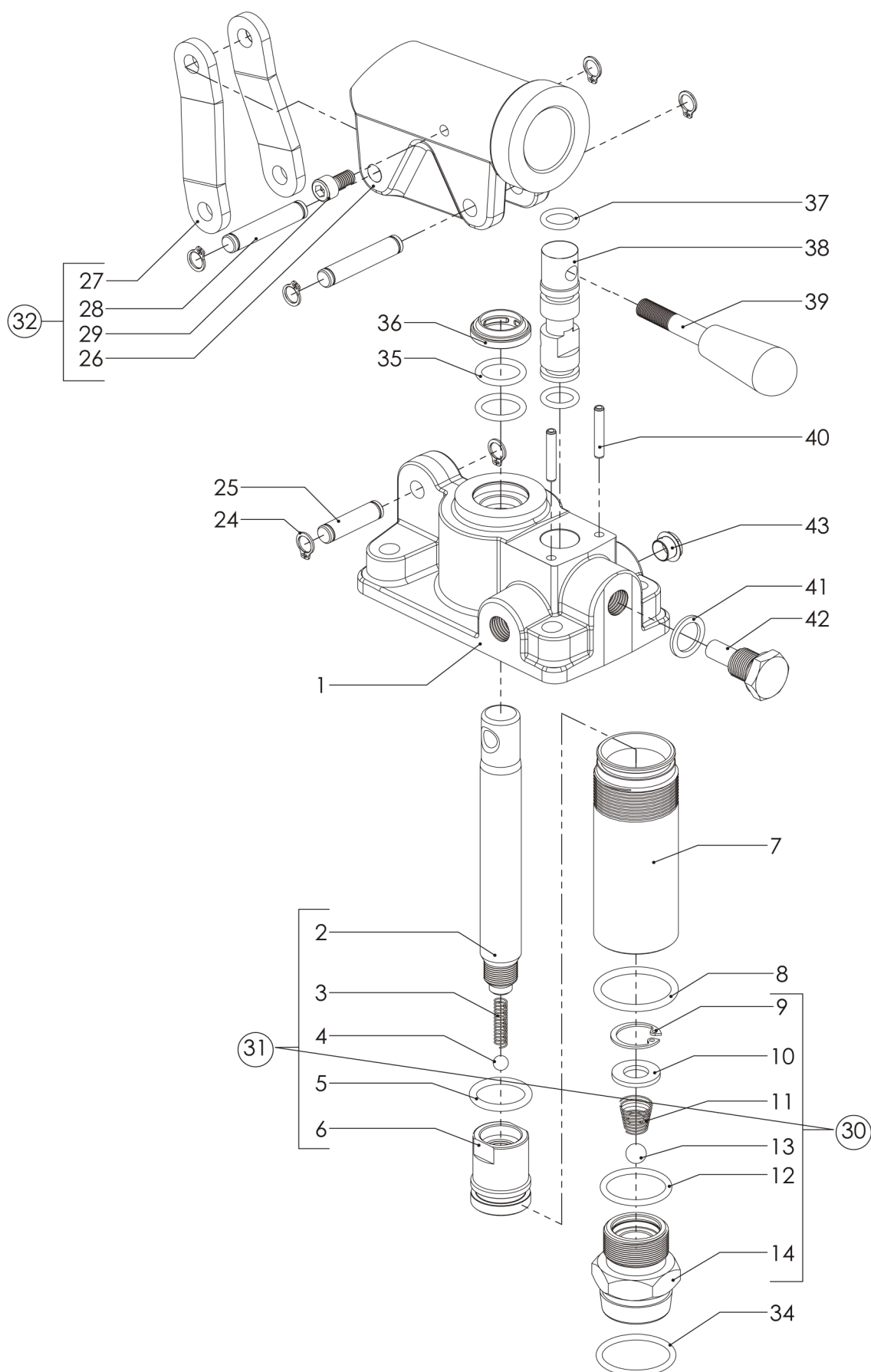
Base Code "0" **ORV TT - 25** Displacement Type



ORV CC - 25

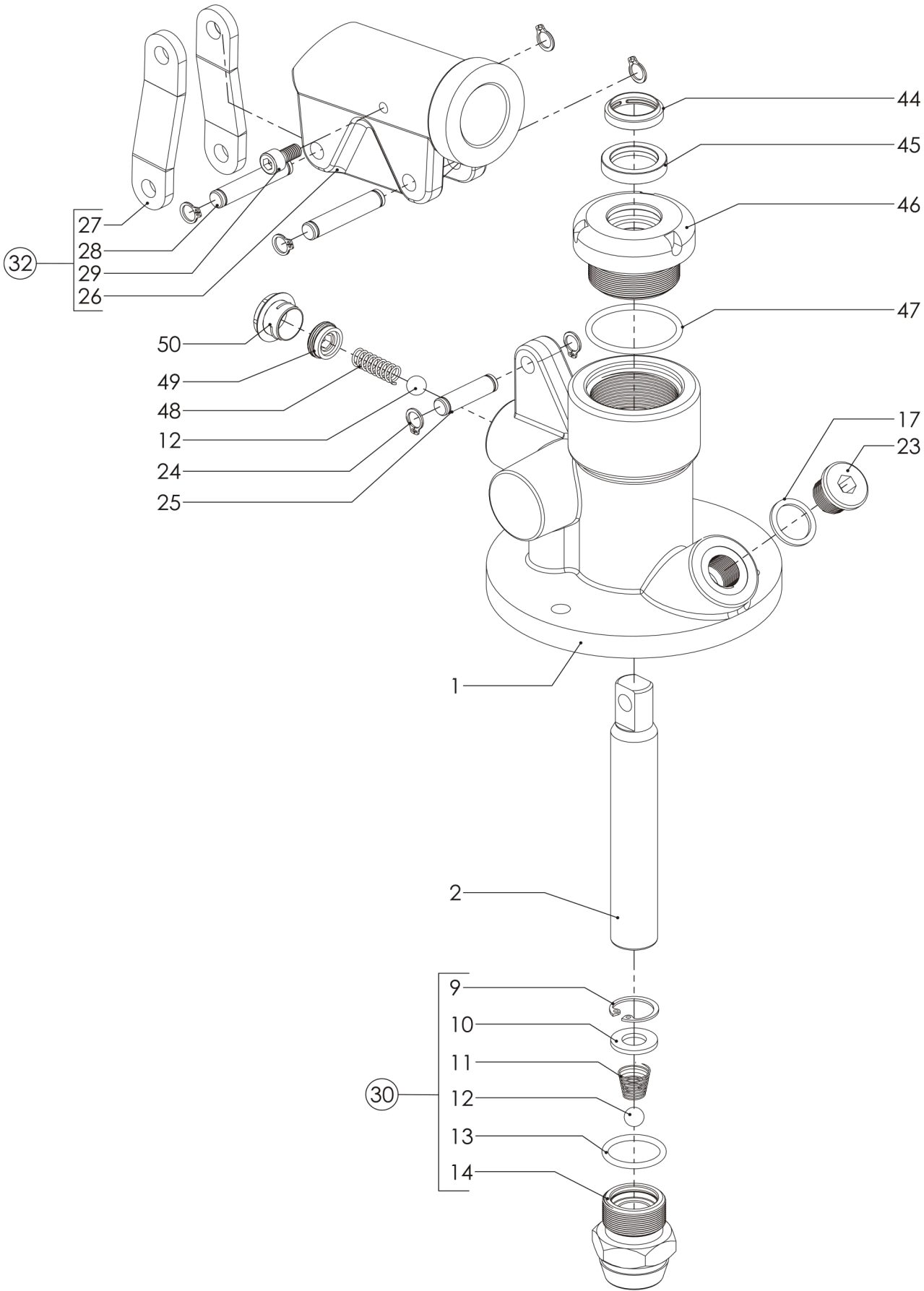
Base Code
"0"

Displacement
Type



ORV RTC - 25

Base Code "0" Displacement Type

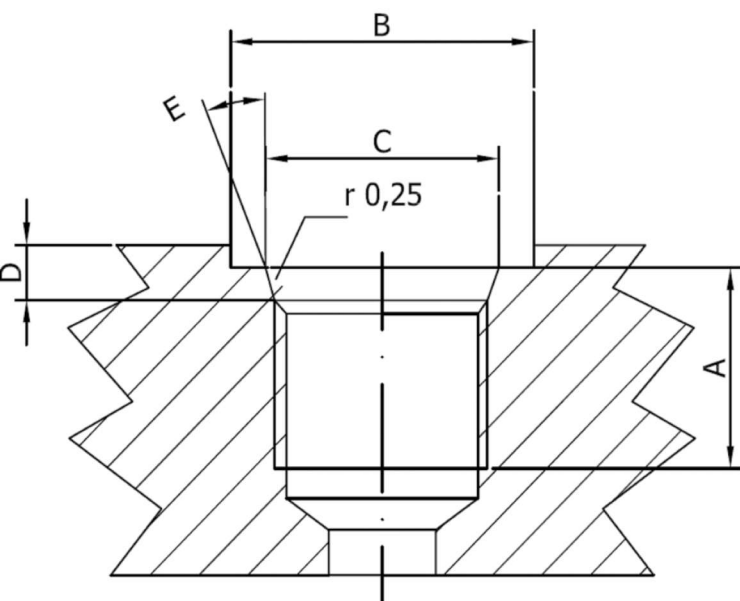


PART LIST

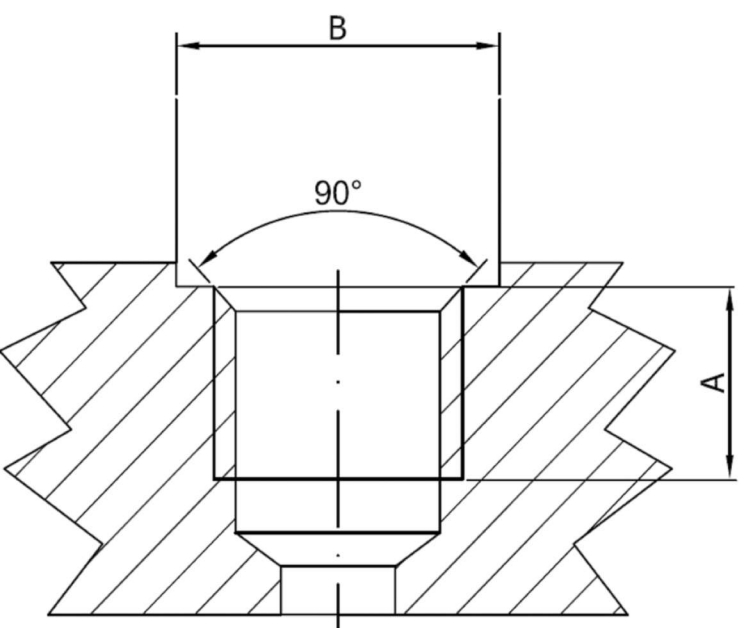
ITEM NO	TYPE			ORDER CODE	PART NAME	DESCRIPTION	QUANTITY
	TT-25	CC-25	RTC-25				
1a	x			1TE025100	Hand Pump Body		1
1b		x		1CE025100	Hand Pump Body		1
1c			x	1KCE025100	Hand Pump Body		1
2a	x			1TE025101	Rod		1
2b		x		1CE025101	Rod		1
2c			x	1KCE025101	Rod		1
3	x	x	x	1TE025102	Piston Spring		1
4	x	x	x	1TE025103	Piston Ball		1
5	x	x	x	1TE025104	O-ring	20x3	1
6	x	x	x	1TE025105	Piston		1
7	x	x	x	1TE025106	Steel Pipe		1
8	x	x	x	1TE025107	O-ring	29x3	1
9	x	x	x	1TE025108	Circlip	DIN472 - 20x1	1
10	x	x	x	1TE025109	Washer	M10	1
11	x	x	x	1TE02510	Suction Spring		1
12	x	x	x	1TE025111	Suction Ball		1
13	x	x	x	1TE025112	O-ring	24,5x2,58	1
14	x	x	x	1TE025113	Suction Valve Casing		1
15	x			1TE025114	O-ring	16x3	2
16	x			1TE025115	Wiper Seal	16x24x5/7	1
17	x		x	1TE025116	Washer	G 3/8"	2
18	x			1TE025117	Tank Ball		1
19	x			1TE025118	Tank Valve Casing		1
20	x			1TE025119	O-ring	8x2	1
21	x			1TE025120	Tank Pin		1
22	x			1TE025121	Knob		1
23	x		x	1TE025122	Plug	G 3/8"	1
24	x	x	x	1TE025123	Circlip	DIN 471 - 8x0,8	6
25	x	x	x	1TE025124	Short Pin		1
26	x	x	x	1TE025125	Lever Holder		1
27	x	x	x	1TE025126	Holder Bracket		2
28	x	x	x	1TE025127	Long Pin		2
29	x	x	x	1HP025101	Screw	DIN 912 - M6x12	1
30	x	x	x	1HP025102	Cylinder Group		
31	x	x	x	1HP025102	Piston Group		
32	x	x	x	1HP025103	Hinge Group		
33	x	x	x	1HP025104	Valve Group		
34		x		1CE025102	O-ring	23x2,5	1
35		x		1CE025103	O-ring	15,88x2,62	2
36		x		1CE025104	Wiper Seal	17x25x4x7	1
37		x		1CE025105	O-ring	11,3x2,4	2
38		x		1CE025106	Spool		1
39		x		1CE025107	Handle	M8	1
40		x		1CE025108	Spring Pin	ISO 8752 - 4x24	2
41		x		1CE025109	Washer	G 1/4"	1
42		x		1CE025110	Plug		1
43		x		1CE025111	Plastig Plug	G 1/4"	1
44			x	1KCE025102	Wiper Seal	20x25x4,3/6	1
45			x	1KCE025103	Rod Seal	20x28x5,5	1
46			x	1KCE025104	Rod Cover		1
47			x	1KCE025105	O-ring	36,17x2,62	1
48			x	1KCE025106	Tank Spring		1
49			x	1KCE025107	Tank Cover		1
50			x	1KCE025108	Plastig Plug	G 3/8"	1

TECHNICAL DATA

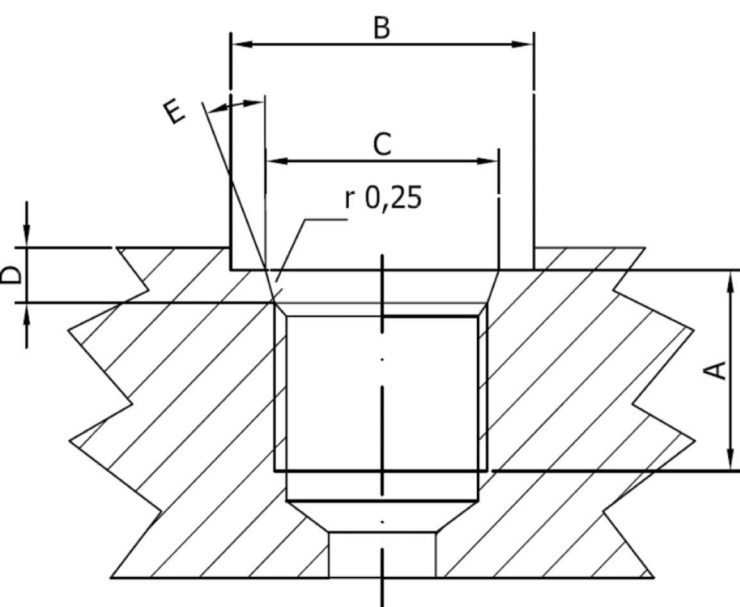
Ports Dimensional Data



SAE UN-UNF (ISO 725)							
Dimensions		7/8-14 UNF SAE10		1"1/16-12 UN SAE12		1"5/16-12 UN SAE16	
mm	in						
A		17	0,67	20	0,79	20	0,79
B		34	1,34	41	1,61	49	1,92
C		23,9	0,94	29,2	1,15	35,5	1,40
D		2,5	0,10	3,3	0,13	3,3	0,13
E		15°		15°		15°	



BSP (ISO 228)							
Dimensions		G 1/2"		G 3/4		G1	
mm	in						
A		16	0,63	18	0,71	20	0,79
B		27	1,06	33	1,30	40	1,57



METRIC (ISO 262)					
Dimensions		M22x1,5 ISO 262		M27x2 ISO 262	
mm	in				
A		16	0,63	18	0,71
B		31,5	1,24	37,7	1,48