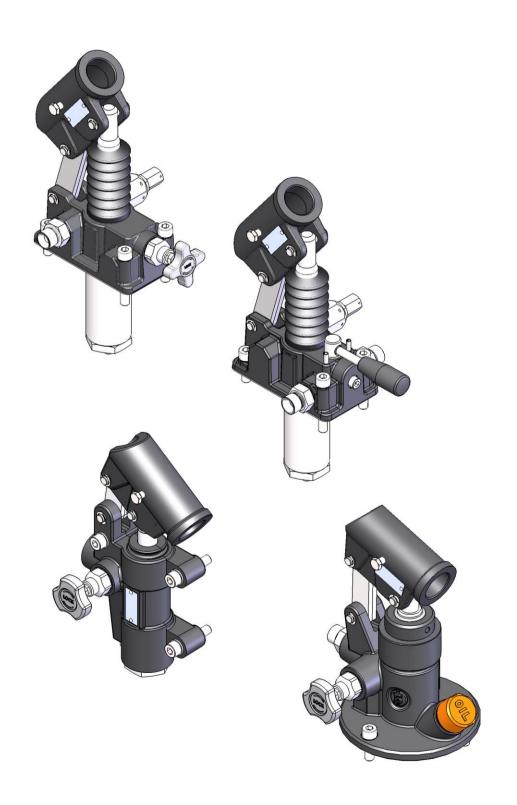
# **Piston type hand pumps**



## Piston type hand pumps

Hand pumps are generally employed for intermittent or emergency applications. The wide range for integrated applications with auxiliary valves allow the solution of any requirement. The cast-iron body, high resistance lapped and chrome plated steel rod. They are available in wall bracket and flangeable on tank versions with various types of pumping single acting (PRP) and double-acting (PRB/D). They can be supplied with steel tanks with alkyd paint from 1 to 10 lt.

PRB – double acting pumps for single acting cylinders PRBD – double acting pumps for double acting cylinders PRBC – double acting pump for single acting cylinders PRP – single acting pump for single acting cylinders

Read this instructions carefully before installation. All operations must be carried out by qualified personnel following the instructions. The user must periodically inspect, based on the conditions of use and the substances used, the presence of corrosion, dirt, the state of wear and correct function of the valves.

All pumps include 550 mm handle, unless WoL code is used. The pump assembly includes suction filter and suction tube. If pump is bought without a tank – suction tube of 176 mm is included in the package.

#### Additional information

This catalogue shows the product in the most standard configuration. For special requests please contact sales.

#### WARNING!

All specifications of this catalogue refer to the standard product at this date. Badestnost, oriented in continuous improvement, reserves the right to discontinue, modify or revise specifications, without notice.

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

First edition 03-2021



# Piston type hand pumps

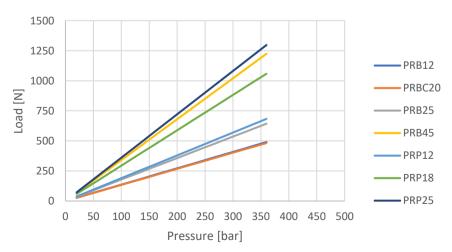
# **Working conditions**

Dunan tuna	DDD/D\13	DDD/D\2E	DDD/D\4E	DDDC20	PRP12	DDD10	PRP25	
Pump type	PKD(D)12		PRB(D)45	PRBC20		PRP18		
Туре		Double	acting		S	ingle actin	g	
Displacement	12 cm <sup>3</sup>	25 cm <sup>3</sup>	45 cm <sup>3</sup>	20 cm <sup>3</sup>	12 cm <sup>3</sup>	18 cm <sup>3</sup>	25 cm <sup>3</sup>	
	0.7 in <sup>3</sup>	1.5 in <sup>3</sup>	2.7 in <sup>3</sup>	1.2 in <sup>3</sup>	0.7 in <sup>3</sup>	1.1 in <sup>3</sup>	1.5 in <sup>3</sup>	
Max. pressure	380 bar	350 bar	280 bar	350 bar	300 bar	200 bar	160 bar	
	5500 psi	5100 psi	4100 psi	4100 psi	4400 psi	2900 psi	2300 psi	
Optimal pressure	220 bar	120 bar	80 bar	225 bar	160 bar	120 bar	80 bar	
	3200 psi	1700 psi	1200 psi	1200 psi	2300 psi	1700 psi	1200 psi	
Fluid	Mineral based oil (DIN51524)							
Fluid								
temperature	from -25 °C	to 70 °C			from -13	° F to 158	3 ° F	
(NBR seals)								
Viscosity (min.)	10 mm <sup>2</sup> /s				10 cSt			
Viscosity (max.)	500 mm <sup>2</sup> /s				500 cSt			
Max. level of					NAC 4 602			
contamination	20/18/15 -	ISO 4406			NAS 1683	3 - class 10	1	
Ambient		0 -					) _	
temperature	from -20 °C	to 60 °C		from -4 $^{\circ}$ F to 140 $^{\circ}$ F				
Note - for different working conditions contact sales dent								

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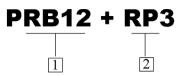
Refernce standard						
		BSP	UN-UNF	Metric	NPTF	
Thread		ISO 228/1	ISO 263	ISO 262	Ansi B1.20.3	
according to		BS 2779	ANSI B1.1 unified			
Cavity	ISO	1179	11926	9974-1		
dimension	SAE		J1926	J2244	J476a	
according to	DIN	3852-2 (Shape X or Y)		3852-1 (Shape X or Y)		

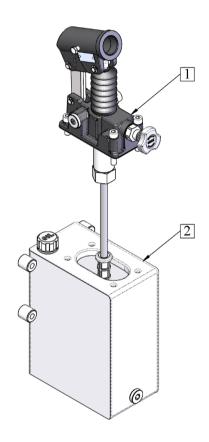
## Load effort for 550 mm handle





# Full order code (pump and tank)



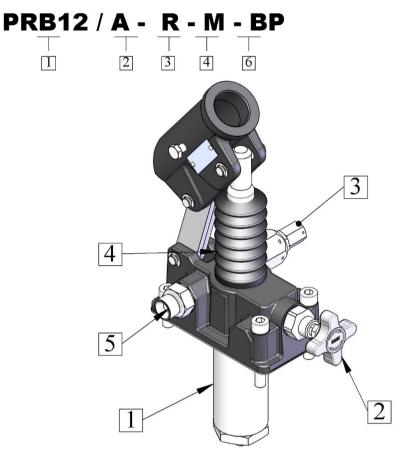


## 1. Pump (page 5)

2. Prismatic tanks (page 8)					
RP1	1L tank				
RP2	2L tank				
RP3	3L tank				
RP5	5L tank				
RP7	7L tank				
RP10	10L tank				
3. Pump location with respect to the tank					
(180)	Pump rotated 180 deg				



# Order code

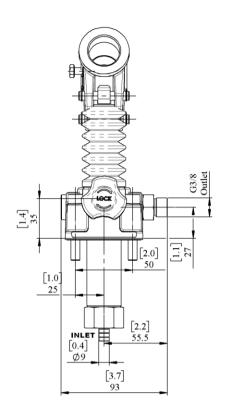


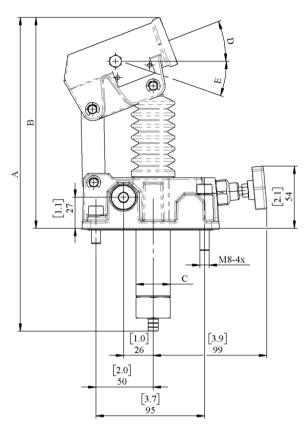
_	_		
1	Pι	ımn	tyne

	1. I dilip type
PRB12/25/45	Double acting pump for single acting cylinders
PRBD12/25/45	Double acting pump for double acting cylinders
	2. Release valve
omit	3S handle of the release valve
Α	4S handle of the release valve
E	without release valve
3.	Relief valve (PRB/PRBD)
omit	without relief valve
R	with relief valve (right side by default)
RL	with relief valve left side
	4. Other
M	Dust-proof flexible bellow

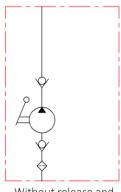
## 5. Stud connectors and reducers

omit	Outlet stud G3/8 (60 deg cone)			
12L	Outlet stud 12L (M18x1,5)			
ad3/8NPTF	Outlet reducer 3/8NPTF			
G1/4B	G1/4 Banjo			
xA	no connector on pos. 2 (PRBD)			
хB	no connector on pos. 1(PRBD)			
<b>12S</b>	Outlet stud 12S (M20x1,5)			
	6. Additional options			
WoL	without 550 mm lever			
WoF	without suction filter			
BP	Black paint RAL9005			

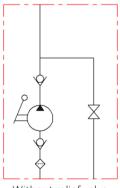




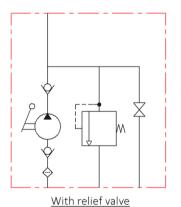
## Hydraulic schemes





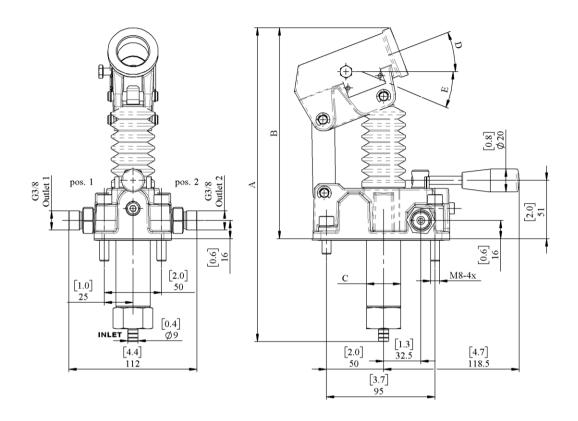


Without relief valve

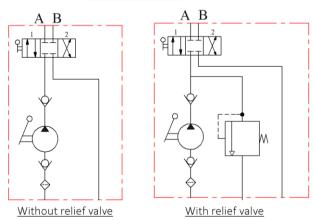


Туре		A	E	3	C	:	D	Е	m:	ass
туре				0	kg* lbs*					
PRB12	274	10.8	184	7.2	30.0	1.2	21	20	4.0	8.8
PRB25	286	11.3	195	7.7	35.0	1.2	34	21	4.2	9.3
PRB45	307	12.1	200	7.9	40	1.6	53.0	25	4.5	9.9





#### Hydraulic schemes

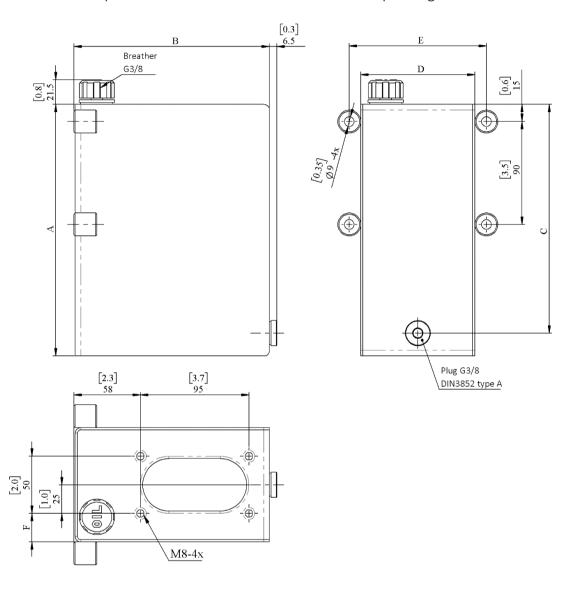


Tuno		A	В		С		D	Е	ma	ass
Туре			mm*	in*				0	kg*	lbs*
PRBD12	274	10.8	184	7.2	30.0	1.2	21	20	4.0	8.8
PRBD25	286	11.3	195	7.7	35.0	1.2	34	21	4.2	9.3
PRBD45	307	12.1	200	7.9	40	1.6	53.0	25	4.5	9.9





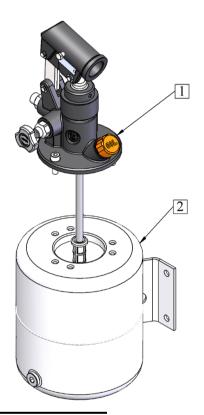
Each tank is painted in RAL9005 and includes the corresponding suction tube and filter



Tuno		4	В		С		D		Е		F		ma	iss
Туре						mm	* in *						kg*/	bs*
RP1	120	4.7	171	6.7	100	3.9	100	3.9	120	4.7	25	1.0	1.7	3.7
RP2	170	4.7	171	6.7	150	3.9	100	3.9	120	4.7	25	1.0	2.2	4.9
RP3	220	8.7	171	6.7	200	8	100	4	120	5	25	1	2.6	5.7
RP5	200	7.9	176	6.9	180	7	175	7	195	8	62.5	2	3.3	7.3
RP7	290	11.4	176	6.9	270	11	175	7	195	8	62.5	2	4.3	9.5
RP10	380	15.0	176	6.9	360	14	175	7	195	8	62.5	2	5.3	11.7

# Full order code (pump and tank)



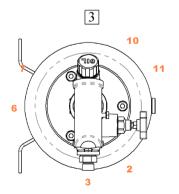


## 1. Pump (page 10)

2. Cylindrical tanks (page 13-14)					
R2	2L tank				
R3	3L tank				
R5	5L tank				
R7	7L tank				
R4	4L tank, no breather (page 14)				

# 3. Outlet orientation (optional for cylindrical tanks)

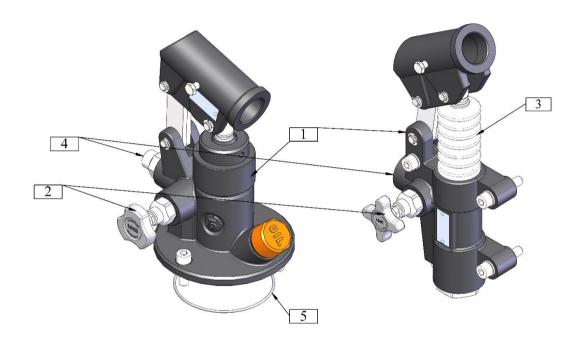
	outlet is oriented to pos. 3
C2	outlet is oriented to pos. 2
C6	outlet is oriented to pos. 6
C7	outlet is oriented to pos. 7
C11	outlet is oriented to pos. 11
C10	outlet is oriented to pos. 10





# Order code

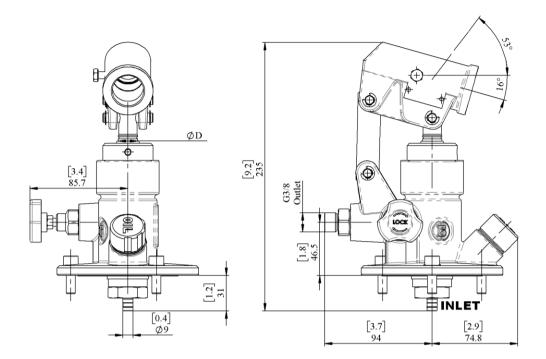
#### 



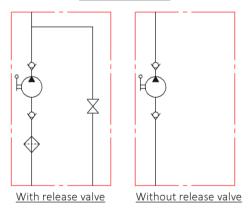
	1. Pump type	4.	Stud connectors and reducers			
PRP12/18/25	Single acting pump for single acting cylinders	omit	Outlet port G3/8 according to ISO1179-1			
PRBC20	Double acting pump for single acting	S60	Outlet stud G3/8 (60 deg cone)			
	cylinders	12L	Outlet stud 12L (M18x1,5)			
	2. Release valve	ad3/8NPTF	Outlet reducer 3/8NPTF			
omit	3S handle of the release valve	x	no connectors			
Α	4S handle of the release valve	<b>12</b> S	Outlet stud 12S (M20x1,5)			
Е	without release valve	5. Additional options				
	3. Other	_ <del>V</del>	Sealing outside M8 area, only PRP			
М	Dust-proof flexible bellow, only for PRBC20	DDM	Bonded seal washers for PRPs M8 screws, only PRP			
		WoL	without 550 mm lever			
		WoF	without suction filter			
		0	Reverse lever arm (180 deg.)			
		BP	Black paint RAL9005			



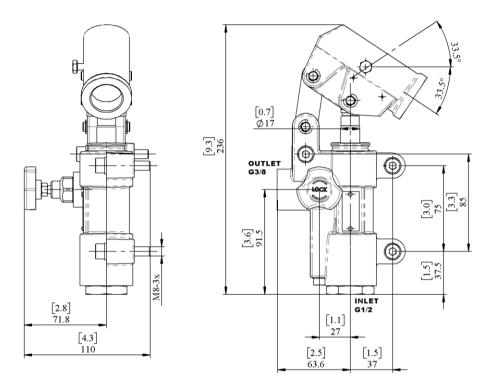




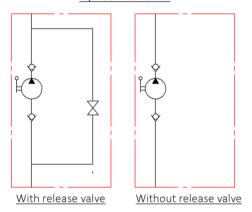
### Hydraulic schemes



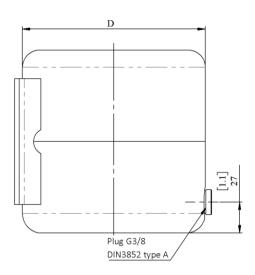


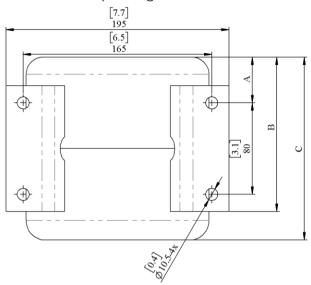


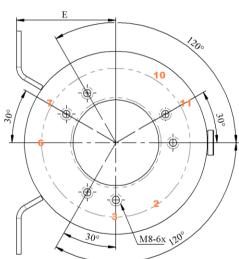
Hydraulic schemes



Each tank is painted in RAL9005 and includes the corresponding suction tube and filter







Туре	A		В		С		D		Е		mass	
		mm* <i>in</i> *								kg* <i>lbs*</i>		
R2G	30	1.2	125	4.9	130	5.1	160	6.3	87	3.4	1.9	4.2
R3G	40	1.2	135	4.9	160	5.1	160	6.3	87	3.4	2.1	4.6
R5G	53	2	148	5.8	214	8.4	185	7.3	101	4.0	3.0	6.6
R7G	53	2	148	5.8	240	9.4	205	8.1	113	4.4	3.7	8.2

Each tank is painted in RAL9005 and includes the corresponding suction tube and filter

