

# Hydraulic Motors M5\* Series

Denison Vane Technology, fixed displacement



ENGINEERING YOUR SUCCESS.

**Ordering Code**

**M5A model description**

**Model No.** M5A - 018 - 5 N 12 - A 1 Y - 00000

**M5A series** - ISO 3019-2  
Mounting flange 80 A2 SW

**Cam ring**  
Volumetric displacement (ml/rev)  
006 = 6,3      018 = 18,0  
010 = 10,0      023 = 23,0  
012 = 12,5      025 = 25,0  
016 = 16,0

**Type of shaft M5A**  
5 = Taper 1/5  
6 = Keyed (ISO G20N)

**Direction of rotation (shaft end view)**  
R = Clockwise (with anti-cavitation check valve)  
L = Counter-clockwise (with anti-cavitation check valve)  
N = Bi-rotational (without any anti-cavitation check valve)

**End cap type** (See table)  
Motor with opposite ports : 01, 02, 03, 04 (not combinable with a motor having the reverse valve option)  
Motor with side ports : 11, 12, 13, 14  
Motor with rear ports : 21, 22, 23, 24 (only combinable with a bi-rotational motor)

**Design letter**

**Max pressure setting value**  
00 = For motor without pressure valve  
21 = Valve set at 210 bar  
28 = Valve set at 280 bar  
\*\* Customised value (please consult Parker)

**Pressure valve type**  
0 = Without pressure valve  
P = Proportional valve  
M = Mechanical valve

**Option**  
0 = No option  
R = Reverse valve

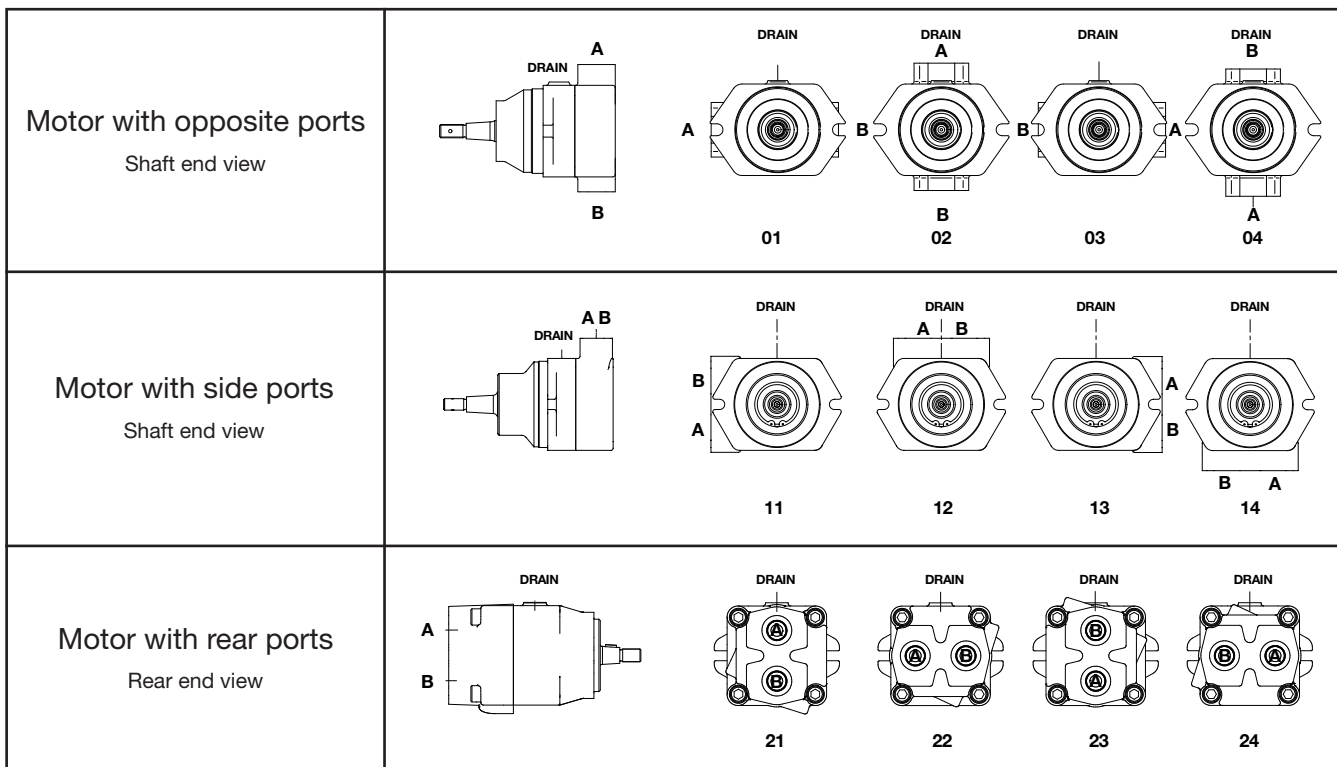
**Connection variables**

M5A bi-rotational series		
Code	A & B ports	Drain port
Y	Metric threaded port M22 x 1,5	Metric threaded port M12 x 1,5

M5A uni-rotational series and reverse valve option			
Code	A port	B port	Drain port
Y	Metric threaded port M22 x 1,5	Metric threaded port M27 x 2	Metric threaded port M12 x 1,5

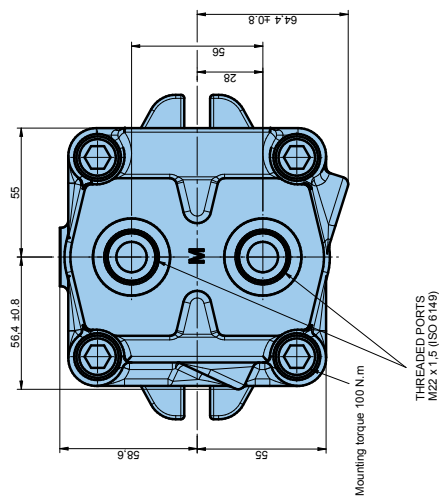
**Seal class**  
1 = S1 BUNA N  
5 = S5 - VITON®

**Position of the ports** (Rotation way see page 21)

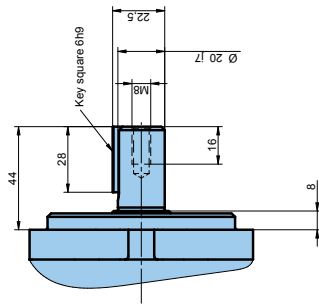
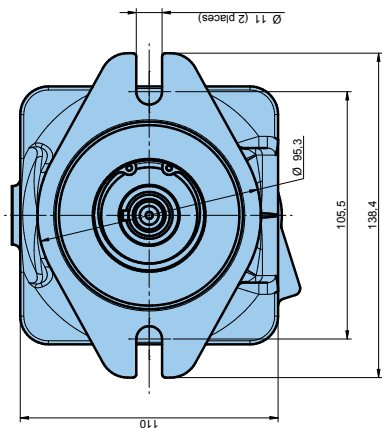
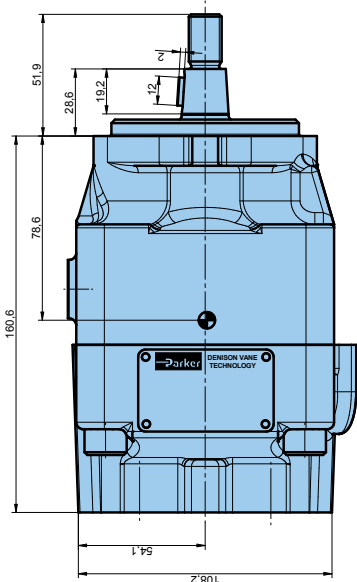


M5A - M5AS motor with rear ports

Weight : 11,0 kg

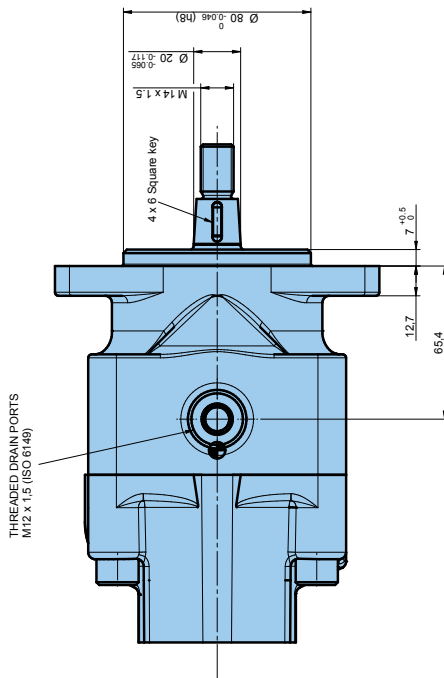


**SHAFT code 5**  
KEYED TAPER 1:5

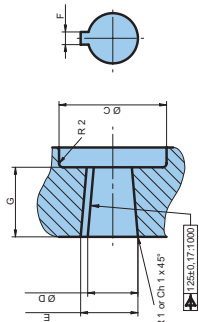


**SHAFT code 6**  
ISO G20N KEYED

● Centre of gravity (bi-rotational version)



Shaft	Code 5
Ø C	35,8/36,2
Ø D	19,8/20,0
E	22,3/22,43
F	4,03/4,08
G	21,9/22,1

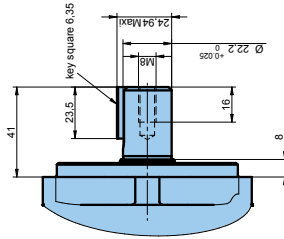
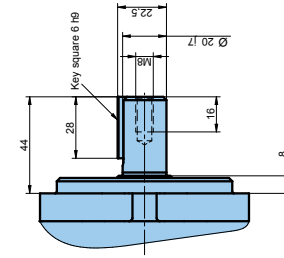
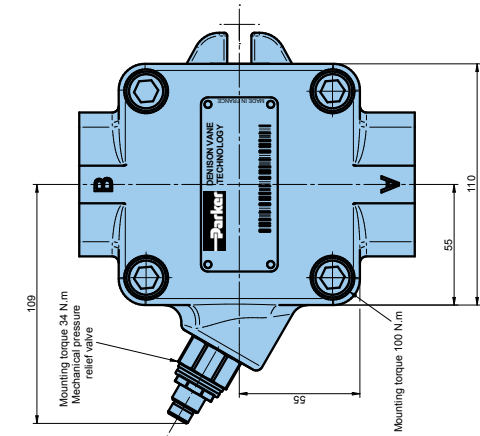


Torque of the steel nut : 80 Nm<sup>1)</sup>

<sup>1)</sup> This torque is for a steel coupling and a nut of at least grade 8.8 quality. It is compulsory to install a castle nut and cotter pin for right-hand rotation and bi-rotational use.

M5A - M5AS motor with opposite ports

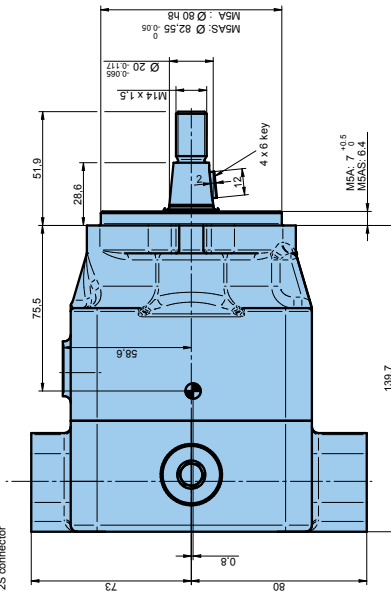
Weight : 11,2 kg



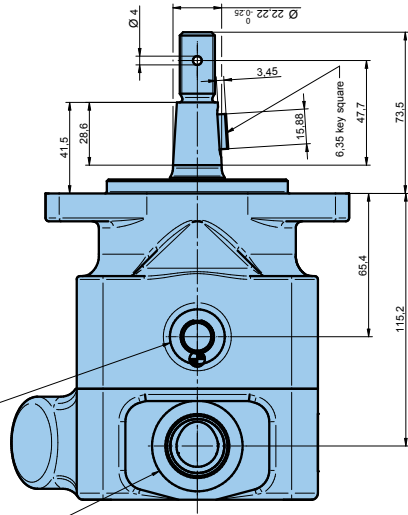
**Shaft code 6**  
ISO G20N keyed

**Shaft code 2**  
SAE B keyed

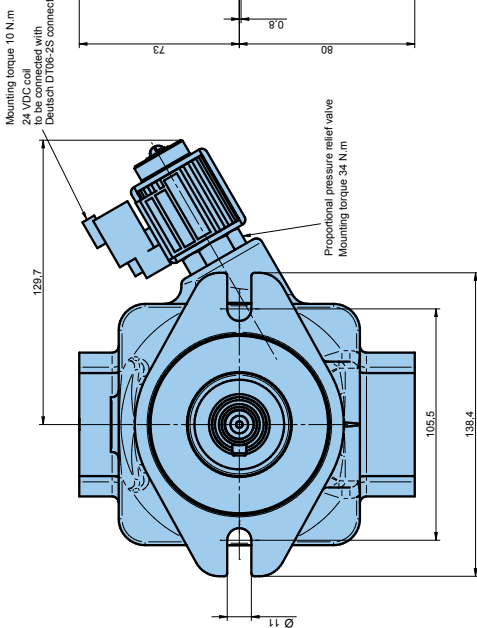
☉ Centre of gravity (bi-rotational version)



**Shaft code 5**  
Keyed taper 1:5



**Shaft code 1**  
SAE B - J744 (Modified)  
Taper 1:25 : 1000



THREADED PORT  
W: SAE 12 (SAE J1926/1)  
Y: M22 x 1.5 (ISO 6149)  
Z: 3/4" BSPP

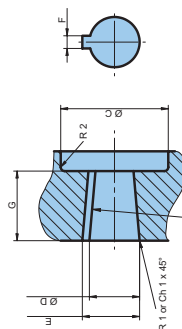
UNI-ROTATIONAL VERSION

THREADED DRAIN PORT  
W: SAE 6 (SAE J1926/1)  
Y: M12 x 1.5 (ISO 6149)  
Z: 1/4" BSPP

"B" OUTLET THREADED PORT  
W: SAE 12 (SAE J1926/1)  
Y: M22 x 1.5 (ISO 6149)  
Z: 3/4" BSPP

"A" INLET THREADED PORT  
W: SAE 10 (SAE J1926/1)  
Y: M18 x 1.5 (ISO 6149)  
Z: 1/2" BSPP

Shaft	Code 1	Code 5
Ø C	54,0	35,8/36,2
Ø D	22,09/22,22	19,8/20,0
E	25,64/25,77	22,3/22,43
F	6,31/6,36	4,03/4,08
G	31,6/32,0	21,9/22,1

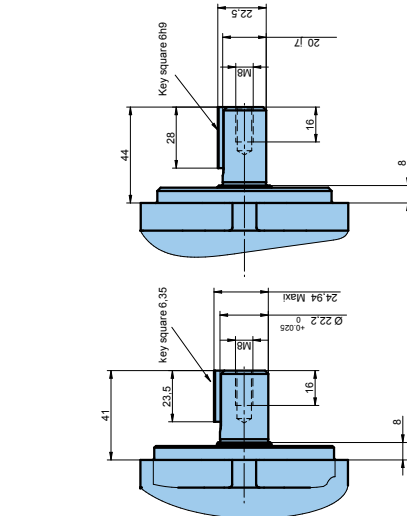
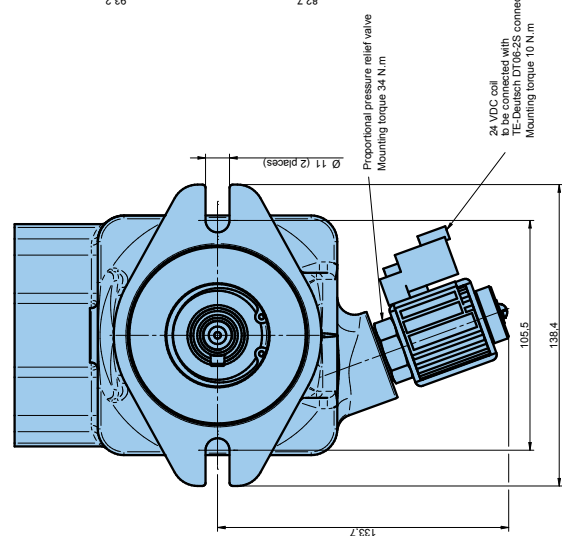
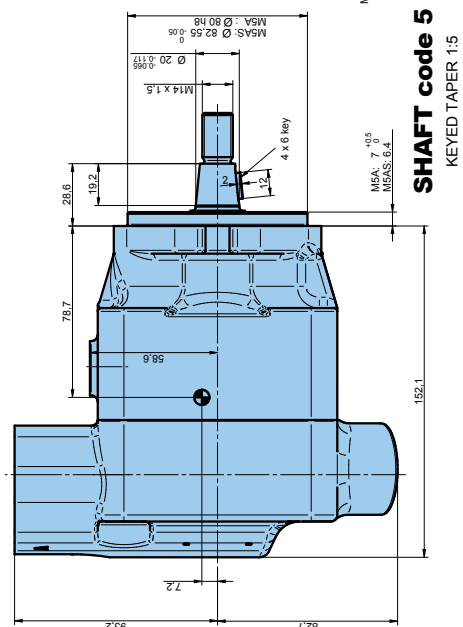
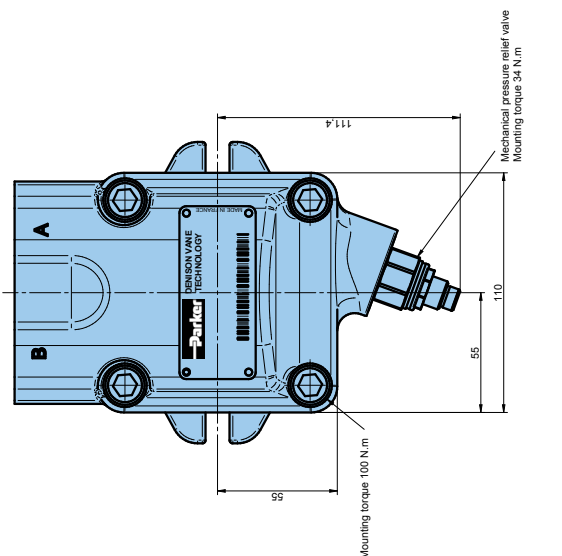


Torque of the nut : 80 Nm <sup>1)</sup>

<sup>1)</sup> This torque is for a steel coupling and a nut of at least grade 8.8 quality. It is compulsory to install a castle nut and cotter pin for right-hand rotation and bi-rotational use.

M5A - M5AS motor with side ports

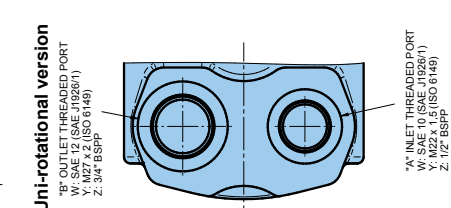
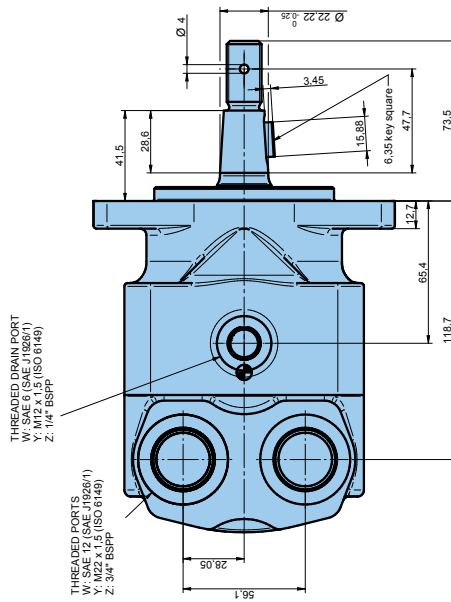
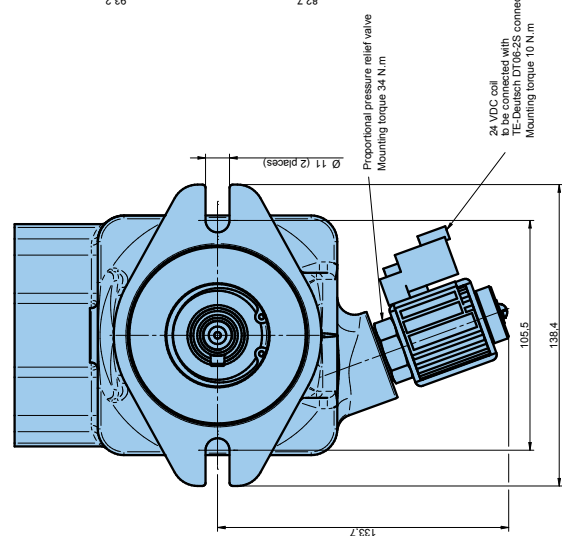
Weight : 12,2 kg



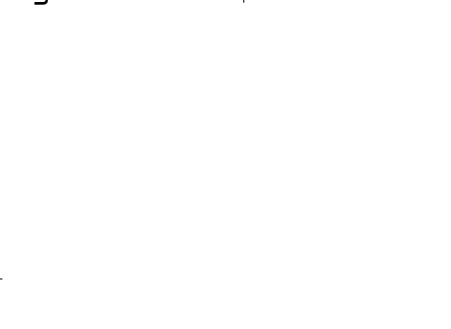
**SHAFT code 2**  
SAE B KEYED

**SHAFT code 6**  
ISO G20N KEYED

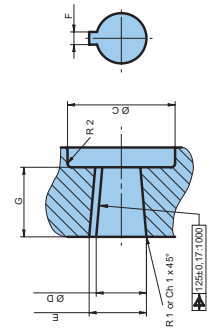
Centre of gravity (bi-rotational version)



**SHAFT code 1**  
SAE B-1744 (Modified)  
TAPER 125 : 1000



Shaft	Code 1	Code 5
Ø C	54,0	35,8/36,2
Ø D	22,09/22,22	19,8/20,0
E	25,64/25,77	22,3/22,43
F	6,31/6,36	4,03/4,08
G	31,6/32,0	21,9/22,1

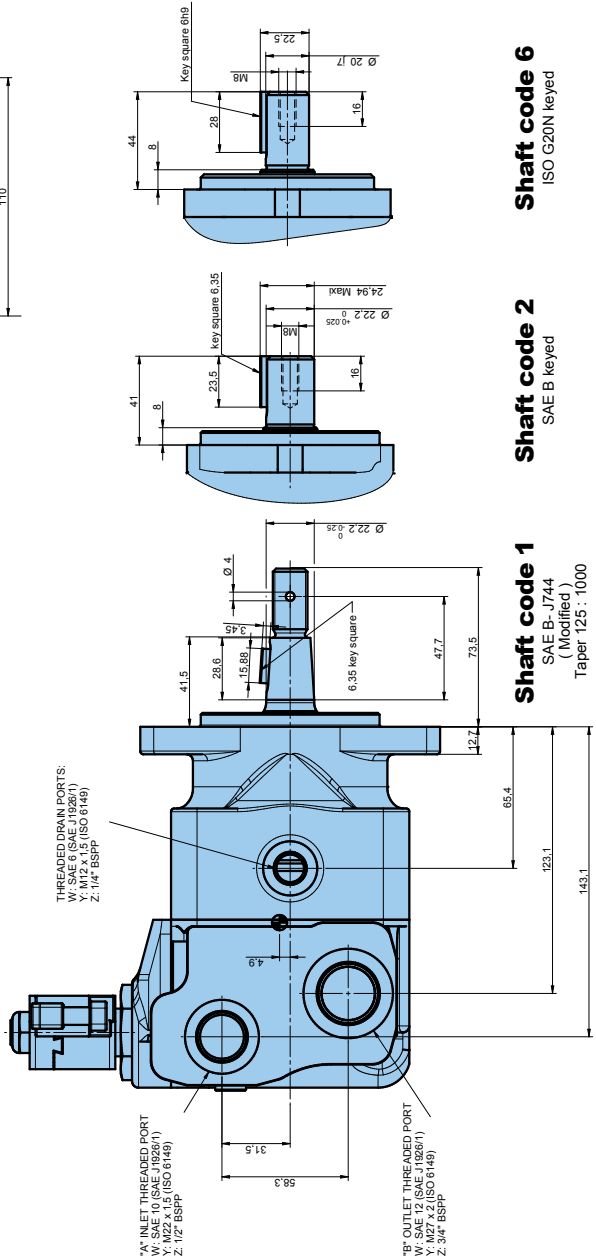
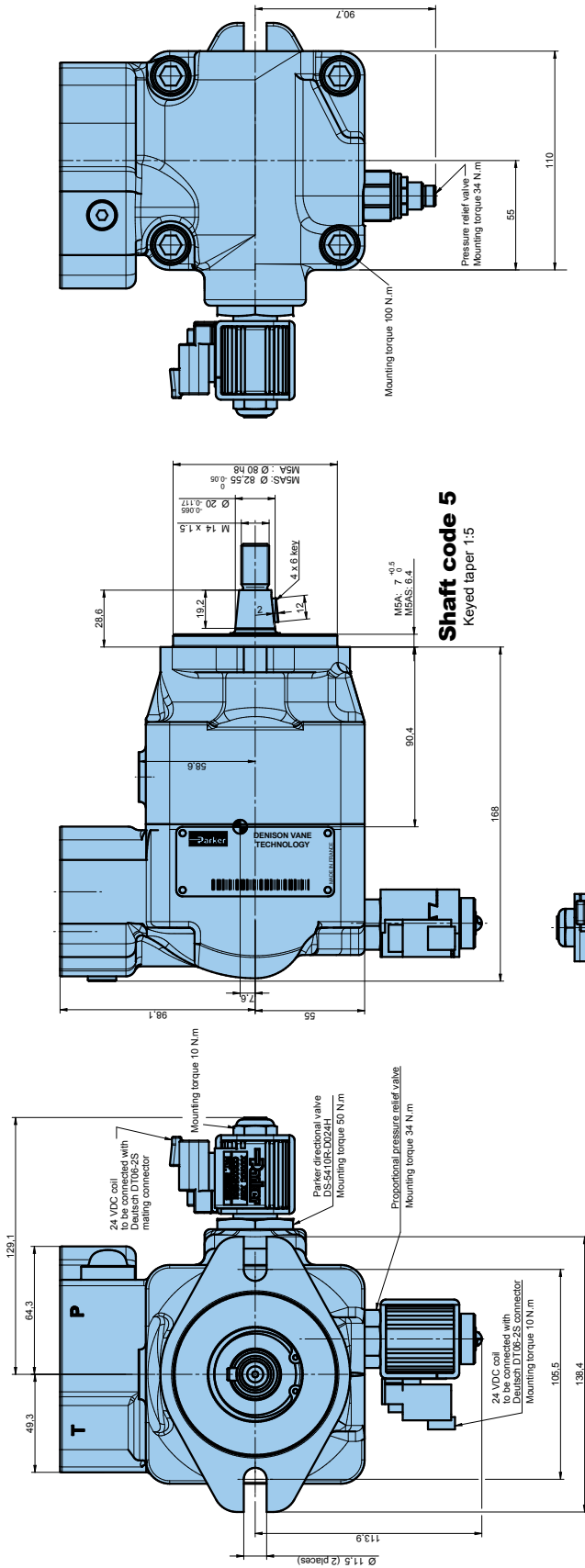


Torque of the steel nut : 80 Nm<sup>1)</sup>

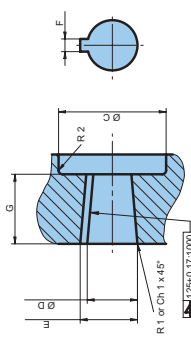
<sup>1)</sup> This torque is for a steel coupling and a nut of at least grade 8.8 quality. It is compulsory to install a castle nut and cotter pin for right-hand rotation and bi-rotational use.

M5A - M5AS motor with reverse valve option

Weight : 13,9 kg



Shaft	Code 1	Code 5
Ø C	54,0	35,8/36,2
Ø D	22,09/22,22	19,8/20,0
E	25,64/25,77	22,3/22,43
F	6,31/6,36	4,03/4,08
G	31,6/32,0	21,9/22,1



Torque of the steel nut : 80 Nm <sup>1)</sup>

<sup>1)</sup> This torque is for a steel coupling and a nut of at least grade 8.8 quality. It is compulsory to install a castle nut and cotter pin for right-hand rotation and bi-rotational use.

Centre of gravity (bi-rotational version)

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