



Battioni®
Pagani

Setting the pace since 1953

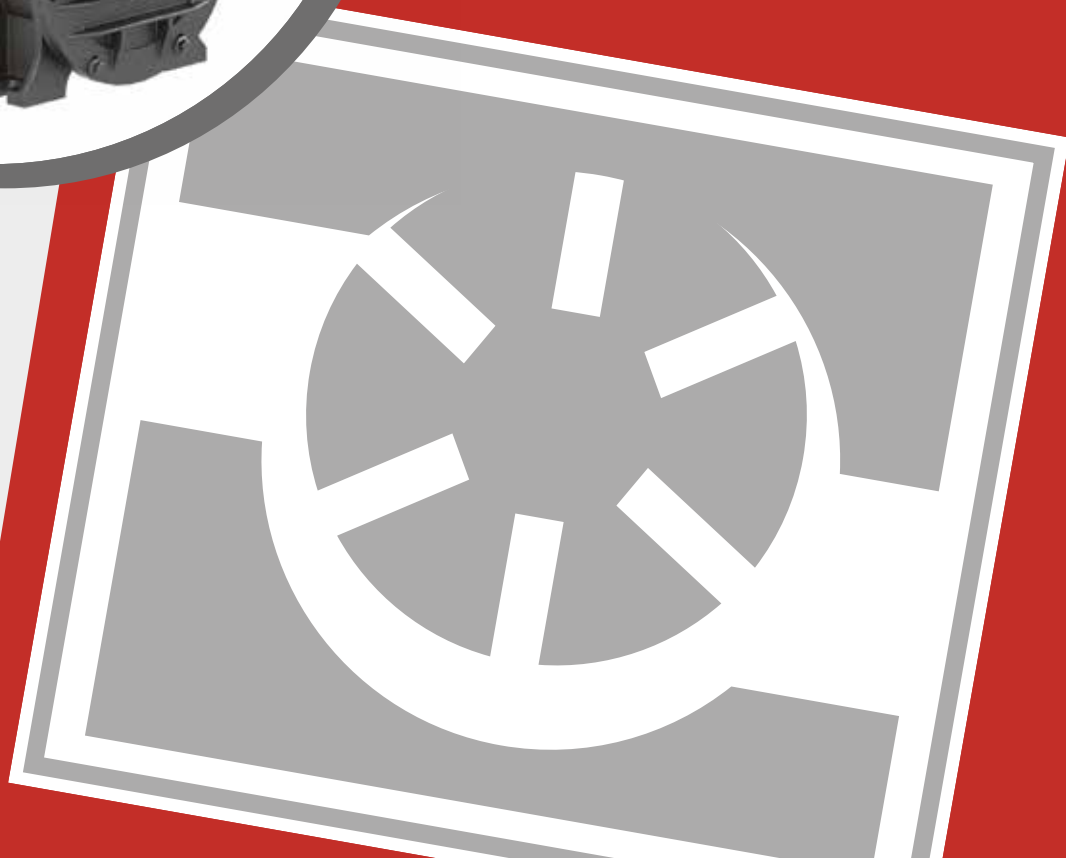


Technical Catalogue
Catalogo Tecnico
Technischer Katalog

2020

BALLAST

3500 - 4500 - 6000 - 7500
9000 - 11000 - 13500 - 16000



www.bapag.it

rev. 2 del 15/10/2020



**Battioni®
Pagani**

Setting the pace since 1953

Kit Aluminum Final Air Filter

Kit filtro aria alluminio
Saugfilter Satz

Predisposition for overpressure valve

Predisposizione per valvola di sovrappressione
Vorbereitung für Überdruckventil

Forced lubrication pump as standard (automatic lubrication on request)

Pompa di lubrificazione forzata di serie (lubrificazione automatica a richiesta)
Druckschmierung als Serie (Automatische Schmierung auf Anfrage)

Temperature indicator

Rilevatore di temperatura
Temperaturdedektor



160° C Irreversible indicator

Indicatore Irreversibile 160° C
irreversibel Anzeiger 160°C

Nr. 8 Long Life Blades as standard
Heat-resistant blades of special material as standard
Nr.8 Palette "long life" resistenti al calore di serie
Nr. 8 Hitzebeständigen Lamellen aus Spezialmaterial als Serie



Extend Oil level indicator

Indicatore livello olio esterno
Ölstandsanzeige

Air injection cooling

Iniezione aria di raffreddamento
Injektion der Luftkühlung



**AIR INJECTION
COOLED - ROTARY
VANES VACUUM/
PRESSURE PUMP**



3500 - 4500 - 6000 - 7500 - 9000 - 11000 - 13500

● **Selector vacuum - pressure**
Selettore Vuoto - Pressione
Wähler von Vakuum/Druck



● **CPS - CRASH PROTECTION SYSTEM**

Sliding Flanges to avoid breakages of the body and rotor during vanes crashes

Flange con asole di scorrimento in caso di ingresso materiale o rottura palette
Flansche mit Slotsblättern falls Materialschmierung oder Palettenbruch



Flange-housing alignment control

Tacca di allineamento flangia - corpo
Ausrichtmarke der Flanschgehäuse

● **Blades inspection hole**

Foro ispezione palette
Bohrung für Lamellen Prüfung

Vanes inspection hole with max wearing indicator

Tacca per rilevamento usura palette
Ausrichtmarke für die Abnutzung der Palette



● **Compression and thrust rings for bearings**
Anello di compensazione
Ausgleichsring



On request, it is possible to have the BALLAST 11000-13500 P / H ATEX pumps

A richiesta, possibilità di avere le pompe BALLAST 11000-13500 versione P / H ATEX

Auf Anfrage ist es möglich, die BALLAST 11000-13500 P / H ATEX Pumpen zu haben

VERSIONS



BALLAST - M/MA



BALLAST - P



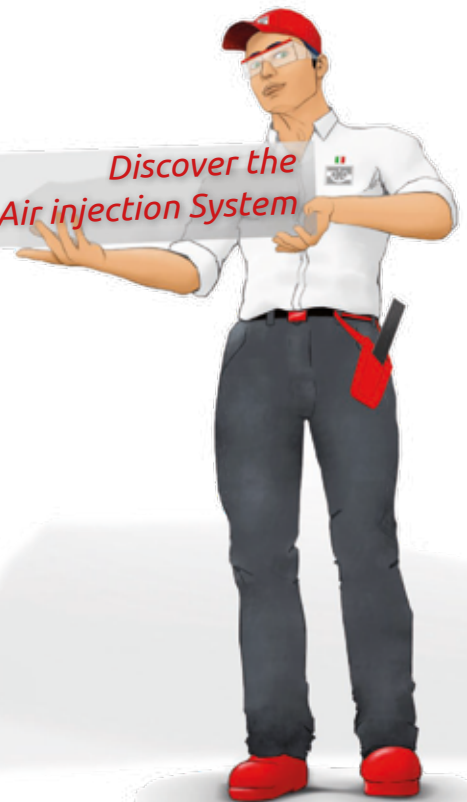
BALLAST - D



BALLAST - H

Air injection cooled -
Rotary Vanes Vacuum/
Pressure pump

Discover the
Air injection System



The picture is only for informative purpose.
See the table on page 89 for the complete list of the available optionals.



BALLAST

3500 - 4500 - 6000 - 7500

BALLAST – Built to last

The BALLAST pump represents a technology breakthrough resulted from a major joint effort in product development and innovative design processes.

The BALLAST features the **Crash Protection System**: a sliding flanges protection mechanism that prevents the housing or rotor to break of in case of vanes crash. The pump is easily repairable inexpensively in field. The BALLAST II pump is equipped with the latest automatic **air injection cooling system** to enable continuous operation at 70% range of vacuum.

The BALLAST is the ideal pump for heavy duty applications.



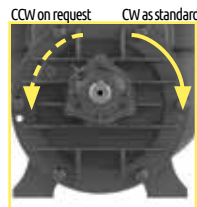
STANDARD FEATURES

- Long Life Blades, Crash Protection System, automatic lubrication, external oil level indicator, side outlets with two revolving elbows, 4-ways valve, check valve
- Thread for Overpressure valve: G 1 1/2
- Available hoses connections: Ø 45 mm / Ø 60 mm / Ø 76 mm (3") / Ø 80 mm

VERSIONS



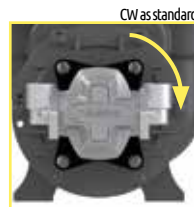
Version M
Splined shaft
1 1/8 - Z6 ISO 500



Version P
Smooth Cylindrical shaft,
Ø 32, lenght 63 mm
Parallel key UNI 6604



Version D
Splined shaft
1 1/8 - Z6 ISO 500



Version H
BALLAST 3500: Group 3 26.7 cc/rev - Pmax 280 bar - In G 1" - Out G 3/4"
BALLAST 4500: Group 3.5 43.98 cc/rev - Pmax 250 bar - In G 1" - Out G 1"
BALLAST 6000: Group 3.5 43.98 cc/rev - Pmax 250 bar - In G 1" - Out G 1"
BALLAST 7500: Group 3.5 51.83 cc/rev - Pmax 230 bar - In G 1" - Out G 1"

TECHNICAL DATA

	Geometrical capacity			Max rpm		Max abs pressure Bar/PSI	Max vacuum % (inHg)	Max continuous vacuum % (inHg)	Power at max vacuum kW (HP)	Weight kg			
	m³/h	l/min	cfm	M	P/D/H					M	P	D	H
BALLAST 3500	217,3	3621	128	540	1400	2,5 (36)	92% (27,2")	70% (21")	8 (10,7)	101	86	87	100
BALLAST 4500	275,6	4593	162	540	1400	2,5 (36)	92% (27,2")	70% (21")	10 (13,4)	111	96	97	111
BALLAST 6000	371,0	6183	218	540	1400	2,5 (36)	94% (28,0")	70% (21")	12 (16,1)	126	111	112	126
BALLAST 7500	455,8	7596	268	540	1400	2,5 (36)	94% (28,0")	70% (21")	14 (18,8)	144	129	130	145

OPTIONALS



Hydraulic Changeover
Code 6080200303



Pneumatic Revolving Changeover
Code 6080200302



Kit Aluminum final air filter 500 Self-Cleaning
Code 6080200363



Kit Vacuum Relief Valve For Revolving Elbow
Code 6080200486



Battioni Pagani Vacuum Pump Oil 5 lt.
Code 5070200100



Battioni Pagani Flushing Fluid 5 lt.
Code 5070200102



Flushing Kit
Code 6080200325



Pump Controller



Pump Active Controller




Customized Painting



ACCESSORIES

01 **Vacuum Relief Valve 1"1/2**
Code 5100200012
Setting range:
-0,3 bar / -0,8 bar
Working temperature:
-20°C / +90°C
Thread: G 1"1/2
Weight: 0,65 kg



02 **Overpressure Safety Valve - 1"1/2**
Code 5100200010
Setting range:
+0,3 bar / +1,5 bar
Working temperature:
-20°C / +90°C
Thread: G 1"1/2
Weight: 1,02 kg



06 **Filter - Silencer**
Code 5090000110
Ø 45 mm
Code 5090000083
Ø 60 mm
Code 5090000044
Ø 80 mm
Hose connection:
Ø 45-60-80 mm
Weight: 4-7 kg




Tank with side pipe


04A **Rain Cap**
Code 5090000111
Ø 45 mm
Code 5090000060
Ø 60 mm
Code 5090000061
Ø 80 mm
Weight: 0,3/0,4 kg



04B **Pre-Filter**
Code 5090000045
Ø 60 mm
Code 5090000046
Ø 80 mm
Weight: 0,6/1,1 kg



07 **Sliding Support**
Code 5090000138 (Ø 165)
(Silencer Code 5090000110)
Code 5090000139 (Ø 187)
(Silencer Code 5090000083)



Air injection cooled - Rotary Vanes Vacuum/ Pressure pump

03 **Primary Overflow Valve - Single Rubber Ball**
Code 6100200006 - Ø 45
Code 6100200007 - Ø 60
Code 6100200008 - Ø 80
Iron ring to be welded
Weight: 4,7/9,6 kg



05 **Secondary Valve - Single Rubber Ball**
Code 6100200003 - Ø 45
Code 6100200004 - Ø 60
Code 6100200005 - Ø 80
Weight: 18,5/20,5 kg



05A **Discharge Valve - 3/4"**
Code 5040200006
To be fitted on Secondary valve



05B **Gauge - Ø 80 mm Axial Connection**
Code 5101700007
To be fitted on Secondary valve





BALLAST

9000 - 11000 - 13500



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The BALLAST is the ideal pump for heavy duty applications.



STANDARD FEATURES

- Long Life Blades, Crash Protection System, automatic lubrication, external oil level indicator, side outlets with two revolving elbows, 4-ways valve, poppet check valve
- Thread for Overpressure valve: G 2"
- Available hoses connections: Ø 76 mm (3") / Ø 80 mm / Ø 100 mm (4")

VERSIONS

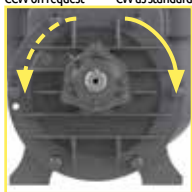
CCW as standard



Version M - MA

Splined shaft
1"3/8 - Z6 ISO 500

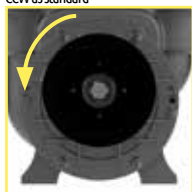
CCW on request CW as standard



Version P

Smooth Cylindrical shaft,
Ø 32, length 63 mm
Parallel key UNI 6604

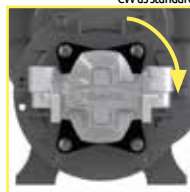
CCW as standard



Version D

Splined shaft
1"3/8 - Z6 ISO 500

CW as standard



Version H

MEC 9000: Group 3.5 51.83 cc/rev - Pmax 230 bar - In G 1" - Out G 1"
MEC 11000: Group 3.5 73.82 cc/rev - Pmax 180 bar - In G 1" - Out G 1"1/4
MEC 13500: Group 4 86.56 cc/rev - Pmax 280 bar - In G 1"1/4 - Out G 1"1/2

TECHNICAL DATA

	Geometrical capacity			Max rpm			Max abs pressure Bar/PSI	Max vacuum % (inHg)	Max continuous vacuum % (inHg)	Power at max vacuum kW (HP)	Weight kg			
	m ³ /h	l/min	cfm	M	MA	P/D/H					M/MA	P	D	H
BALLAST 9000	541,8	9030	319	600	1000	1400	2,5 (36)	95% (28,5")	70% (21")	17 (22,8)	145	131	132	154
BALLAST 11000	668,22	11137	393	600	1000	1400	2,5 (36)	95% (28,5")	70% (21")	21 (28,2)	160	146	147	170
BALLAST 13500	830,7	13845	489	600	1000	1400	2,5 (36)	95% (28,5")	70% (21")	25 (33,5)	178	164	165	211

OPTIONALS



Kit Aluminum Final Air Filter 1300 Self-Cleaning
Code 6080200290



Kit Vacuum Relief Valve For Revolving Elbow
Code 6080200181



Pneumatic Revolving Changeover
Code 6080200238



Pneumatic Revolving Changeover - 3 Positions
Code 6080200293



Hydraulic Revolving Changeover
Code 509000078



On request, it is possible to have the BALLAST 11000-13500 P / H ATEX pumps



Hydraulic Changeover
Code 6080200176



Flushing Kit
Code 6080200325



Extra Side Tank
Code 6080200304 (LA)
Code 6080200310 (LF)



Customized Painting



Battioni Pagani Vacuum Pump Oil 5 lt.
Code 5070200100



Battioni Pagani Flushing Fluid 5 lt.
Code 5070200102

OPTIONALS

BALLAST

9000 - 11000 - 13500



Pump Controller



Pump Active Controller

ACCESSORIES



01 Vacuum Relief Valve 1 1/2"

Code 5100200012
Setting range:
-0,3 bar / -0,8 bar
Working temperature:
-20°C / +90°C
Thread: G 1 1/2"
Weight: 0,65 kg



02 Overpressure Safety Valve - 2"

Code 5100200011
Setting range:
+0,3 bar / +1,5 bar
Working temperature:
-20°C / +90°C
Thread: G 2"
Weight: 1,02 kg



Tank with side pipe



06 Filter - Silencer
Code 5090000025
BALLAST 9000-11000
Ø 80 mm
Code 5090000026
BALLAST 13500
Ø 100 mm
Hose connection:
Ø 80/100 mm
Weight: 9,5/13 kg



04A Rain Cap
Code 5090000061
BALLAST 9000-11000
Code 5090000062
BALLAST 13500
Weight: 0,4 kg



04B Pre-Filter
Code 5090000046
BALLAST 9000-11000
Code 5090000047
BALLAST 13500



03A Primary Overflow Valve - Two Balls
Code 6100200030 - Ø 76
Code 6100200025 - Ø 80
Code 6100200026 - Ø 100
Iron ring to be welded
Weight: 13,9/14,0 kg



03B Primary Overflow Valve - One SS Ball
Code 6100200027 - Ø 80 SS
Code 6100200028 - Ø 100 SS
Ball material: AISI 316
Iron ring to be welded



05 Secondary Valve - Two Balls
Code 6100200035 - Ø 76
Code 6100200021 - Ø 80
Code 6100200022 - Ø 100
Weight: 35,6 kg



05A Discharge Valve - 1"
Code 5040200014
To be fitted on Secondary valve



05B Gauge - Ø 80 mm Axial Connection
Code 5101700007
To be fitted on Secondary valve

Air injection cooled -
Rotary Vanes Vacuum/
Pressure pump



**Battioni®
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Setting the pace since 1953



Non-return valve

Valvola di non ritorno
Kontrollventil als Serie

Automatic lubrication pump as standard

Pompa di lubrificazione automatica di serie
Automatische Schmierung als Serie



Temperature indicator

Rilevatore di temperatura
Temperaturdedektor



160° C Irreversible indicator

Indicatore Irreversibile 160° C
irreversibel
Anzeiger 160°C

Long Life blades as standard

Palette "long life" resistenti al calore di serie
Hitzebeständigen Lamellen aus
Spezialmaterial als Serie

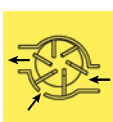


High wearing resistance thanks to cast-iron with high hardness

Elevata resistenza ad usura grazie a ghisa ad alta durezza
Hohe Festigkeit zu Abnutzung für Gußeisen mit hohe Härte

Air injection cooling

Iniezione aria di raffreddamento
Injektion der Luftkühlung



**AIR INJECTION
COOLED - ROTARY
VANES VACUUM/
PRESSURE PUMP**

Selector vacuum - pressure

Selettore Vuoto - Pressione
Wähler von Vakuum/Druck





On request integrated Final air filter, effective in both vacuum and pressure use (integrated air filter cartridge on request)

Filtro aria finale integrato a richiesta, efficace sia in vuoto che in pressione (cartuccia filtro aria integrata a richiesta)

Integrierter Endluftfilter auf Anfrage, wirksam in Vakuum und auch in Druck (integrierte luftfilterpatrone auf anfrage)

CPS - CRASH PROTECTION SYSTEM

Sliding Flanges to avoid breakages of the body and rotor during vanes crashes

Flange con asole di scorrimento in caso di ingresso materiale o rottura palette
Flansche mit Slotsblättern falls
Materialschmierung oder Palettenbruch

External Side oil tank
Serbatoio olio laterale
Externe Seitenöltank

Blades inspection hole
Foro ispezione palette
Bohrung für Lamellen Prüfung

Vaness inspection hole with max wearing indicator
Tacca per rilevamento usura palette
Ausrichtmarke für die Abnutzung der Palette



On request, it is possible to have the BALLAST 16000 P / H ATEX pumps

A richiesta, possibilità di avere le pompe BALLAST 16000 versione P / H ATEX

Auf Anfrage ist es möglich, die BALLAST 16000 P / H ATEX Pumpen zu haben

VERSIONS



BALLAST - M/MA



BALLAST - P



BALLAST - D



BALLAST - H



BALLAST - K/KA

Air injection cooled -
Rotary Vanes Vacuum/
Pressure pump

Discover the CPS - Crash Protection System



The picture is only for informative purpose.
See the table on page 89 for the complete list of the available optionals.



BALLAST

16000

BALLAST – Built to last

The BALLAST pump represents a technology breakthrough resulted from a major joint effort in product development and innovative design processes.

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The BALLAST is the ideal pump for heavy duty applications.



STANDARD FEATURES

- Long Life Blades, Crash Protection System, Automatic lubrication, External Side oil tank, Predisposition integrated Air Filter, 4-ways valve, Poppet Check valve
- Available hoses connections: Ø 76 mm (3") / Ø 80 mm / Ø 100 mm (4")

VERSIONS

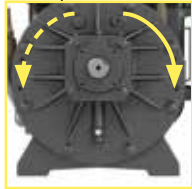
CCW as standard



Version M / MA

Splined shaft
1"3/8 - Z6 ISO 500

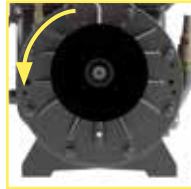
CCW on request CW as standard



Version P

Smooth Cylindrical shaft,
Ø 40, lenght 89 mm
Parallel key UNI 6604

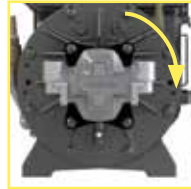
CCW as standard



Version D

Splined shaft
1"3/8 - Z6 ISO 500

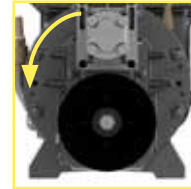
CW as standard



Version H

Group 4
86.56 cc/rev -
Pmax 280 bar
In G 1"1/4 - Out G 1" 1/2

CCW as standard



Version K / KA

Splined shaft
1"3/8 - Z6 ISO 500
Support Gr. 2 or Gr. 3
Hydraulic pump on request

TECHNICAL DATA

	Geometrical capacity			Max rpm			Max abs pressure Bar/PSI	Max vacuum % (inHg)	Max continuous vacuum % (inHg)	Power at max vacuum kW (HP)	Weight kg			
	m³/h	l/min	cfm	M/K	P/D/H	MA/KA					M/MA	P/D	H	K/KA
BALLAST 16000	916	15270	539	540	1400	1000	2,5 (36)	95% (28,5")	70% (21")	33 (44,2)	230	210	247	220

OPTIONALS



Hydraulic Changeover

Code 6080200315



Hydraulic Revolving Changeover

Code 5090000108



Pneumatic Revolving Changeover

Code 6080200306



Pneumatic Revolving Changeover - 3 Positions

Code 6080200307



Battioni Pagani Vacuum Pump Oil 5 lt.

Code 5070200100



Battioni Pagani Flushing Fluid 5 lt.

Code 5070200102



Flushing Kit

Code 6080200325



Kit Overpressure 2"

Code 6080200389



Cartridge for internal final filter

Code 4060505057



Kit Aluminum Final Air filter 1300 - Ø100 Self-cleaning

Code 6080200426



On request, it is possible to have the BALLAST 116000 ATEX pumps



Customized Painting



OPTIONALS



Pump Controller



**Pump Active
Controller**

ACCESSORIES



01

**Vacuum Relief Valve
1"1/2**

Code 5100200012
Setting range:
-0,3 bar / -0,8 bar
Working temperature:
-20°C / +90°C
Thread: 1"1/2
Weight: 0,65 kg



02

**Overpressure Safety
Valve - 2"**

Code 5100200011
Setting range:
+0,3 bar / +1,5 bar
Working temperature:
-20°C / +90°C
Thread: 2"
Weight: 1,2 kg



**Pulley with
pneumatic
clutch**

Code 6080200034



Tank with side pipe



06

Filter - Silencer

Code 5090000026
BALLAST 16000
Hose connection:
Ø 100 mm
Weight: 9,5/13 kg



04A

Rain Cap

Code 5090000062
BALLAST 16000
Weight: 0,4 kg



04B

Pre-Filter

Code 5090000047
BALLAST 16000



03A

**Primary Overflow
Valve - Two Balls**

Code 6100200030-Ø76
Code 6100200025-Ø80
Code 6100200026-Ø100
Iron ring to be welded
Weight: 13,9/14,0 kg



03B

**Primary Overflow
Valve - One SS Ball**

Code 6100200027-
Ø80SS
Code 6100200028-
Ø100SS
Ball material: AISI 316
Iron ring to be welded



05

**Secondary Valve - Two
Balls**

Code 6100200035-Ø76
Code 6100200021-Ø80
Code 6100200022-Ø100
Weight: 35,6 kg



05A

Discharge Valve - 1"
Code 5040200014

Discharge Valve - 1" 1/4
Code 5040200016

To be fitted on Secondary
valve



05B

**Gauge - Ø 80 mm
Axial Connection**
Code 5101700007
To be fitted on
Secondary valve



05

Cyclon valve - 110

Code 6100200033- Ø100
Housing: Galvanized Mild Steel
Cover: aluminum
Weight: 35 kg

Air injection cooled -
Rotary Vanes Vacuum/
Pressure pump



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