

A4 Pumpen mit offenen Ein-Kanal-Laufrädern

Pumpen mit offenen Ein-Kanal-Laufrädern werden zur Förderung von reinen Flüssigkeiten und Abwasser eingesetzt. Anwendungsbereich: Kläranlagen, Kanalisation, Industrie- & öffentliche Abwasser.

Technische Daten

- Fördermenge: bis 280 m³/h
- Förderhöhe: bis 19 m
- Stromversorgung: Drehstrom & Wechselstrom 50 Hz
- Leistung: 1.5 kW bis 7.5 kW
- Druckstutzen: Horizontal DN80, DN100, DN150

Anwendungen

- Schmutzwasser, Kläranlagen, Hebeanlagen
- Sanitärinstallationen: Druckerhöhungsanlagen, Kühlanlagen, Heizungsanlagen, Eisanlagen
- allg. Industrietechnik, Apparatebau, industrielle Waschanlagen

A4

SUBMERSIBLE PUMPS



Elettropompe sommergibili con girante monocanale aperto

Submersible electropumps with open channel impeller

Potenze / Power:	1.5÷7.5 kW
Mandate / Delivery:	DN80-100-150



Impieghi

La serie A 4 poli trova impiego nel pompaggio e nel drenaggio di liquidi chiari e fognari. L'ampia gamma e ottime efficienze idrauliche rendono la serie particolarmente adatta ad essere utilizzata su: depuratori, fognature, zootecnia e canalizzazioni industriali, quali: aeroporti, metropolitane, ospedali, hotel.

Caratteristiche

Tutti i componenti principali sono realizzati in Ghisa GG25. Due tenute meccaniche separate (lato motore a bagno olio, lato girante a contatto con il liquido) e componentistica di prima qualità, ne garantiscono il perfetto funzionamento.

Motori

- Motori asincroni 4 poli con rotore a gabbia di scoiattolo
- Protezione termica T1 e T2 incorporato nel motore da collegare ad un apposito quadro di comando
- Isolamento statore classe F (155°C)
- Grado protezione IP 68

Raffreddamento

Raffreddamento effettuato dal liquido nel quale la pompa è immersa.

Limiti di impiego

- Temperatura massima del liquido: 40°C con unità completamente sommersa
- Disponibili versioni speciali (escluso ATEX) fino alla temperatura liquido di 60°C con unità completamente sommersa, non a servizio continuo (S1)
- Massima profondità di immersione: 20 mt
- Valori pH ammessi: 6-10
- Caratteristiche idrauliche valide per liquidi di densità <1,1 kg/dm³
- Tensioni ammesse: 230/400V o 400/690V ±5% a seconda del modello
- Frequenza ammessa: 50Hz ±2%

Application

The A 4 poles Series is used to pump clear liquids and sewage. The wide range and high hydraulic efficiency renders this series particularly suited to water treatment plants, sewers, farming and industrial plants including in airports, underground public transport, hospitals and hotels.

Characteristic

All main components are made of grey cast iron GG25. Two individual mechanical seals (motor side in the oil chamber, impeller side in contact with the liquid) and high quality parts, ensure the perfect functioning and reliability of the product.

Motor range

- Squirrel cage motor 4 poles
- Thermal protection T1 and T2 embedded in the motor winding (to be wired to the three pole contactor in the control panel)
- Class F insulation (155°C)
- IP 68 protection

Motor cooling

The cooling of the motor is ensured by the liquid where the pump is submerged.

Limits of use

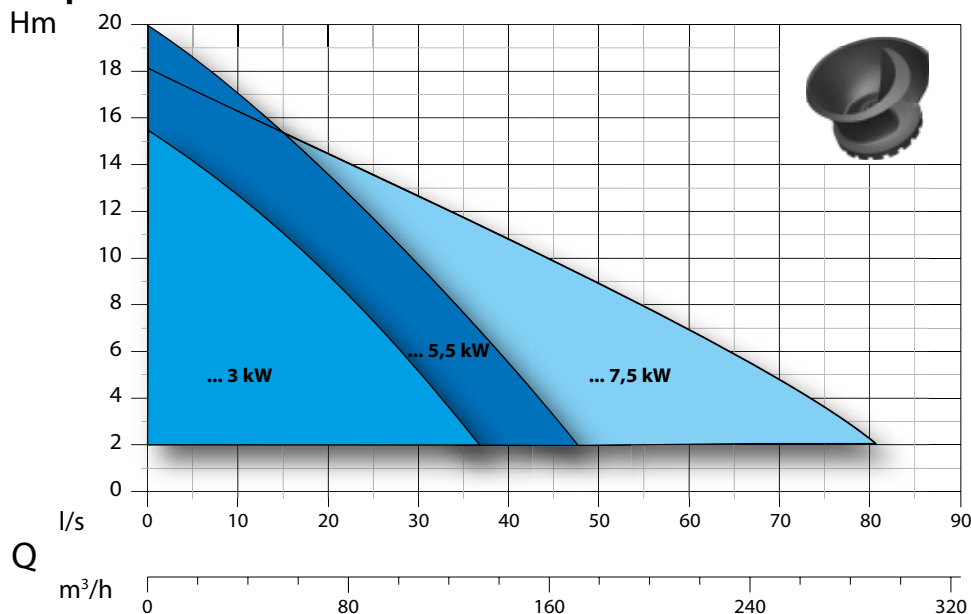
- Max. permissible liquid temperature: 40°C with pump fully submerged
- On request, special version (excluded ATEX) to withstand liquid temperature up to 60°C with pump fully submerged, no S1 service
- Maximum depth of immersion: 20 mt.
- Permissible pH value: 6-10
- Hydraulic features suitable for liquids with density <1,1 kg/dm³
- Allowed voltage: 230/400V or 400/690V ±5% depending on the pump
- Allowed frequency: 50Hz ±2%

Designazione / Designation

AT-EX 80 / 4 / 173 C.256

Numero della curva Curve reference	173
Diametro statore Stator's size	80
Numero poli Poles number	4
Bocca di mandata DN Delivery DN	150
Certificazione ATEX ATEX certification	AT-EX
Serie pompa - T=trifase - M=monofase Pump series - T=ThreePhase - M=Singlephase	

Campo di Prestazione / Performance Overview



Identificazione Curve

Curves Identification

- DN80
- DN100
- DN150

Normative

Norms

Curve secondo ISO 9906:2012 3B2
According to ISO 9906:2012 3B2

Distinta dei componenti e materiali List of components and materials

A4

Anello catena - Chain ring

Acciaio inox AISI 416 - Stainless steel AISI 416

Cassa motore - Motor casing

Ghisa GG25 - Cast iron GG25

Cuscinetto superiore - Upper bearing

Albero motore - Motor shaft

Acciaio inox AISI 420 - Stainless steel AISI 420

Motore elettrico - Electric motor

Rotore - Rotor

Cuscinetto inferiore - Lower bearing

Porta motore - Motor holder

Ghisa GG25 - Cast iron GG25

Tenuta meccanica - Mechanical seal

Ceramica/Grafite - Carbon/Ceramic (CA/CE/Viton)

Porta motore - Motor holder

Ghisa GG25 - Cast iron GG25

Tenuta meccanica - Mechanical seal

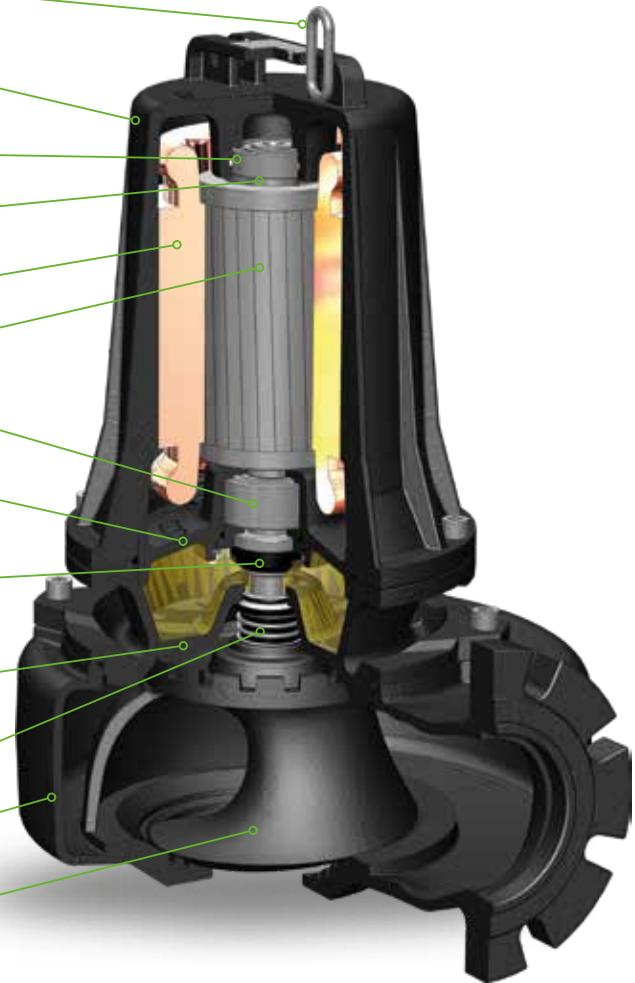
Carburo di silicio - Silicon/Carbide (SiC/SiC/Viton)

Corpo pompa - Body pump

Ghisa GG25 - Cast iron GG25

Girante - Impeller

Ghisa GG25 - Cast iron GG25



Tecnologie e Soluzioni Technology and Features



Giranti

La serie monta giranti Monocanali Aperti ad alte prestazioni. Il trancia-fibre integrato garantisce la massima affidabilità di lavoro, anche in presenza di liquidi con fibre e corpi solidi in sospensione.

Impellers

The A series is fitted with open single channel and highly efficient impellers. The shredding system ensure a high degree of reliability even in presence of fibrous materials and solids in suspension.

Technische Änderungen vorbehalten.
Subject to technical changes.



Pompe antideflagranti / Explosion proof pumps

CE 0477



II 2G Ex db IIB T4 Gb
Ex h IIB T4 Gb
0° ≤ Ta ≤ 40°

EPT 17 ATEX 2702 X

Tutta la serie è disponibile con certificato ATEX su richiesta
Pumps with explosion proof available on request.



Sensore d'umidità

Sensore conforme alle norme sulla sicurezza integrata contro le esplosioni ATEX EN 60079-0, EN 60079-1 tramite barriera di protezione. Di serie su tutta la gamma.

Seal leak detector

The seal leak detector is certified according to the norm ATEX EN 60079-0, EN 60079-1 (through safety barrier) and fitted standard on all series.



Pressacavo

Pressacavo pressofuso in acciaio inox, conforme alla normative: ATEX EN 60079-0, EN 60079-1 con linguetta anti-strappo. Standard su tutta la serie.

Cable gland

The cable gland is made of stainless steel AISI 316 and certified according to the norm ATEX EN 60079-0, EN 60079-1. Standard on all series.

Mandata Orizzontale DN80 PN16 - RPM 1450 1/min 4 poli

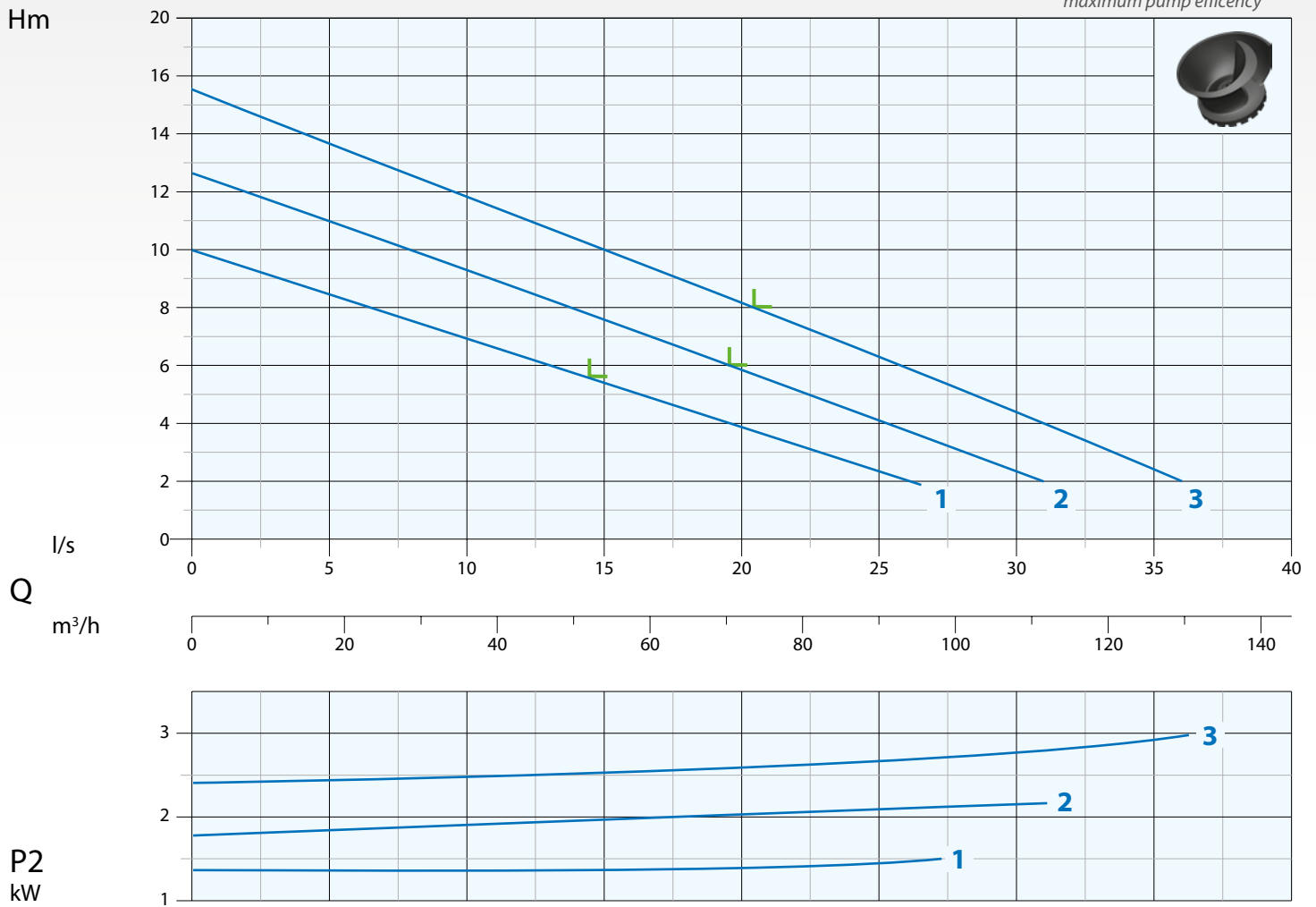
Horizontal Outlet DN80 PN16 - RPM 1450 1/min 4 poles

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Picture for illustration purposes only



Curva di Prestazione Performance Curve

L = rendimento massimo pompa
maximum pump efficiency



N°	Tipo Type	I/s	2,5	5	7,5	10	12,5	15	20	25	30	35
		I/m	150	300	450	600	750	900	1200	1500	1800	2100
		m³/h	9	18	27	36	45	54	72	90	108	126
1	AM-AT 80/4/125 C.242	mt	9	8,5	7,5	7	6	5,5	4	2,5		
2	AT 80/4/152 C.244		12	11	10	9,5	8,5	7,5	6	4	2,5	
3	AT 80/4/152 C.245		14,5	13,5	12,5	11,8	11	10	8	6,5	4,5	2,5

N°	Tipo Type	EX	Mandata Delivery	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A		Hz	
					P1	P2			1 Phase - 230V	µf		3 Phase - 400V
1	AM-AT 80/4/125 C.242	•			2,2	1,5	2		10	45	3,8	
2	AT 80/4/152 C.244	•	DN80 PN16	75 mm	2,9	2,2	3	1450			5,3	50
3	AT 80/4/152 C.245	•			3,9	3	4				7,2	

• Pompa antideflagrante disponibile con certificazioni:
Available explosion proof pump with certifications:

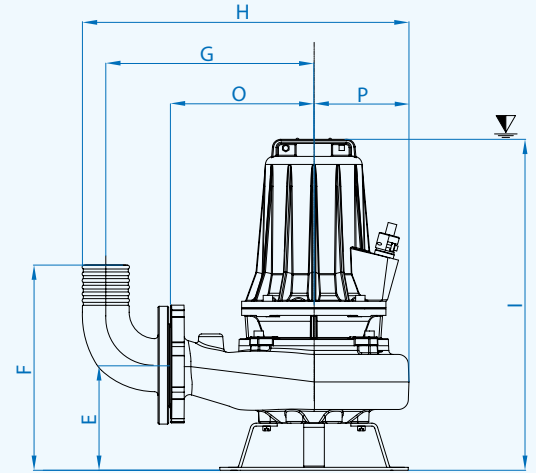
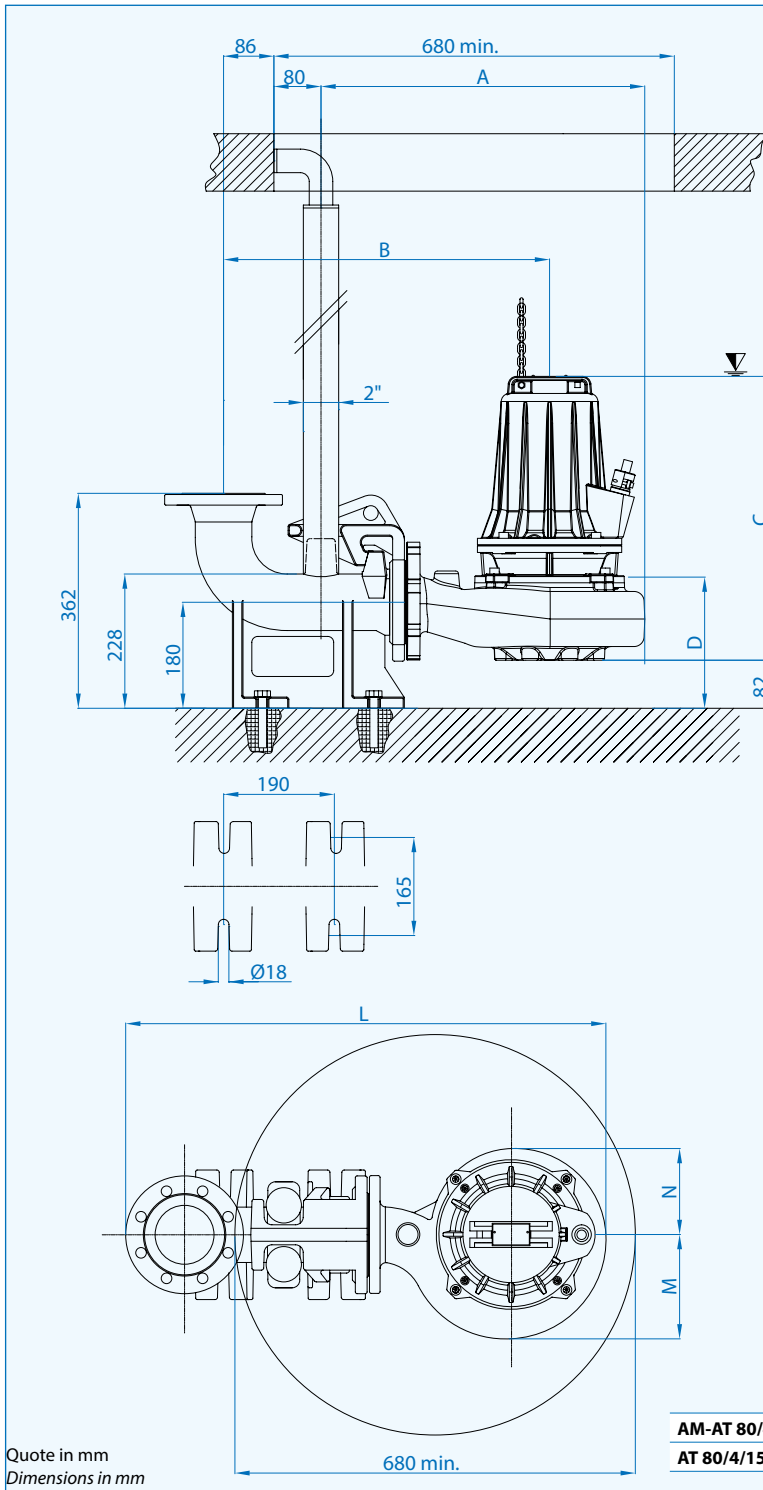


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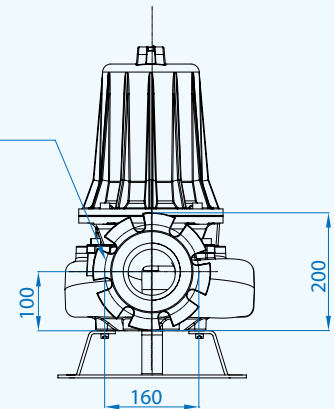


Ex db IIB T4 Gb
Ex h IIB T4 Gb
0° ≤ Ta ≤ 40°

∇ Sommergenza minima
Minimum submersion



DN80 PN16
ex UNI 2278



	A	B	C	D	E	F	G	H	I	L	M	N	O	P
AM-AT 80/4/125 C.242	545	555	441	293	178	348	357	555	521	810	166	143	245	153
AT 80/4/152 C.244-245	552	555	479	227	177	348	353	562	562	818	177	146	245	153

Cavi / Cables

Pompe Pumps	Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm ² Cable cross section mm ²	mt
80/4/125	Standard	1 ~ 230V	H07RN8F	4x1,5+3x0,50 Ø15*	10
	ATEX		NSSHÖU-J	4x1,5+3x0,50 Ø17*	10
	Standard	3 ~ 400V	H07RN8F	4x1,5+3x0,50 Ø15**	10
	ATEX		D.O.L.	NSSHÖU-J	4x1,5+3x0,50 Ø17**
80/4/152	Standard	3 ~ 400V	H07RN8F	4x1,5+3x0,50 Ø15**	10
	ATEX		D.O.L.	NSSHÖU-J	4x1,5+3x0,50 Ø17**

* Di serie con Control-box (condensatore di spunto compreso)
Standard with Control-box (starting capacitor included)

** Terminali liberi - Free terminals

Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AM-AT 80/4/125 C.242				56
AT 80/4/152 C.244	355	580	420	69
AT 80/4/152 C.245				72

Technische Änderungen vorbehalten.
Subject to technical changes.

Accessori - Optional



Piede di accoppiamento
Tipo: DUTY 80 e B5
Automatic coupling foot
Type: DUTY 80 and B5



Curva flangiata con portagomma N2
Base di sostegno P5
Flanged hose connection N2
Foot support P5



Manico inox
Stainless steel handle



Quadri ATEX disponibili su richiesta
Explosion proof control box available on request

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Date_06/02/20

Mandata Orizzontale DN100 PN16 - RPM 1450 1/min 4 poli

Horizontal Outlet DN100 PN16 - RPM 1450 1/min 4 poles

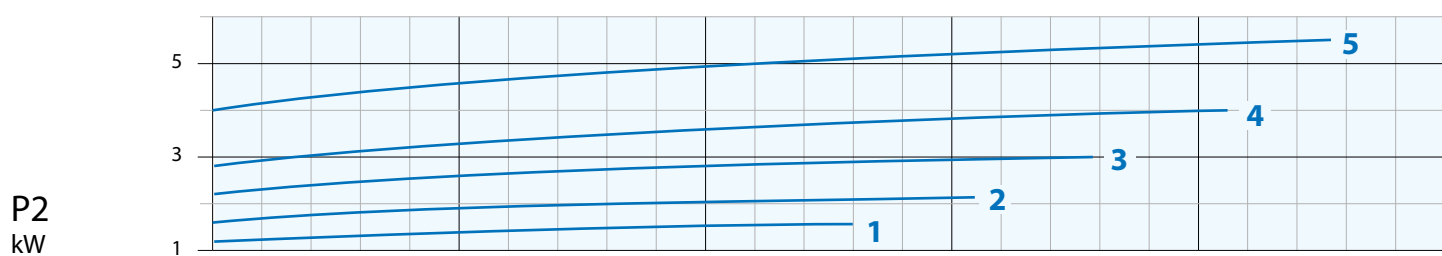
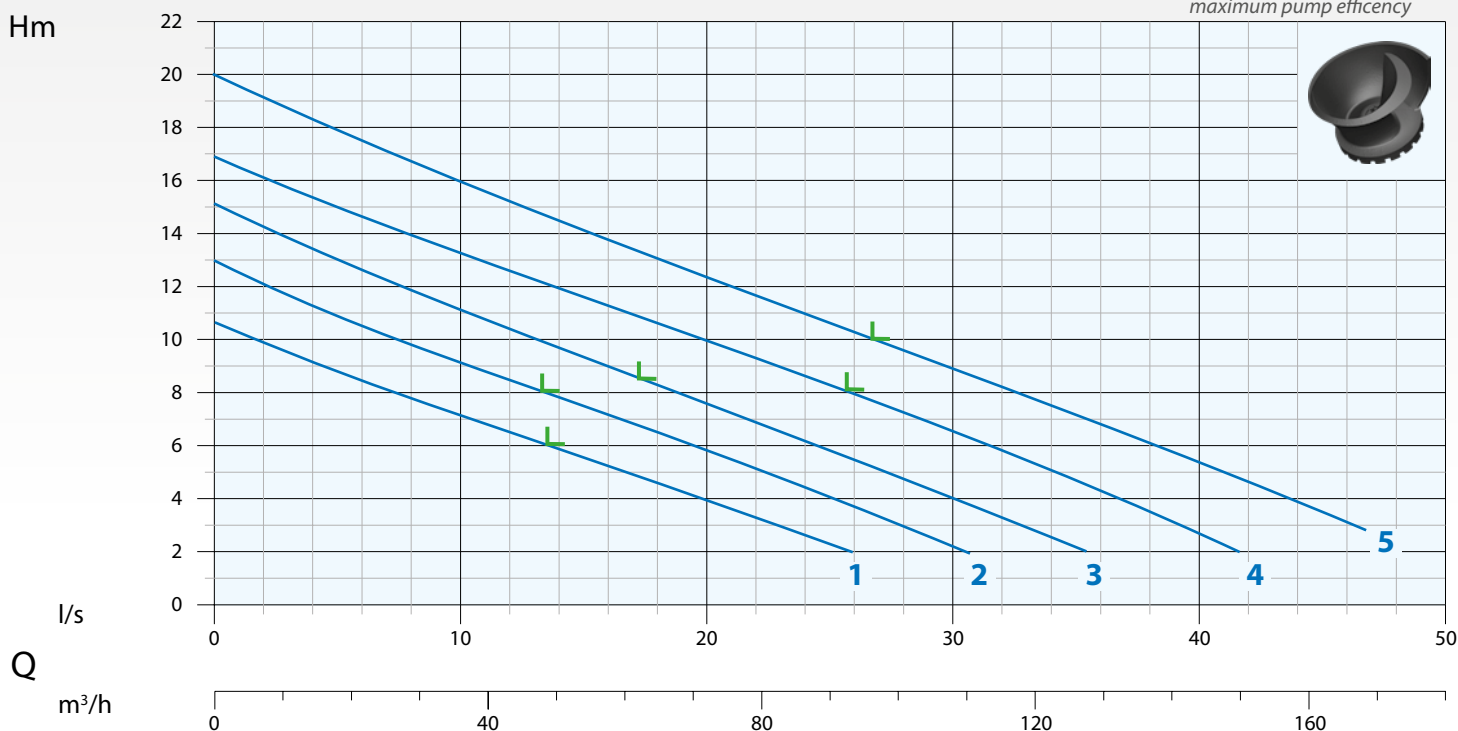
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Curva di Prestazione

Performance Curve

L = rendimento massimo pompa
maximum pump efficiency



N°	Tipo Type	Flow Rate (Q)										
		2	6	10	16	20	26	30	36	40	46	
		l/s	120	360	600	960	1200	1560	1800	2160	2400	2760
		l/m	7,2	21,6	36	57,6	72	93,6	108	129,6	144	165,6
		m³/h	10	8,5	7	5	4	2				
1	AT 100/4/152 C.243	mt	12	10,5	9	7	6	3,5	2			
2	AT 100/4/152 C.244		14	12,5	11	9	7,5	5,5	4	2		
3	AT 100/4/152 C.245		16	14,5	13	11,5	10	8	6,5	4,5	2,5	
4	AT 100/4/173 C.255		19	17,5	16	13,5	12,5	10,5	9	7	5,5	3
5	AT 100/4/173 C.256											

N°	Tipo Type	EX	Mandata Delivery	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A 3 Phase - 400V	Hz
					P1	P2				
1	AT 100/4/152 C.243	•	DN100 PN16	75 mm	2,1	1,7	2,2	1450	3,9	50
2	AT 100/4/152 C.244	•			2,9	2,2	3		5,1	
3	AT 100/4/152 C.245	•			3,8	3	4		7	
4	AT 100/4/173 C.255	•			5,1	4	5,5		9,2	
5	AT 100/4/173 C.256	•			6,4	5,5	7,5		11,5	

• Pompa antideflagrante disponibile con certificazioni:
Available explosion proof pump with certifications:



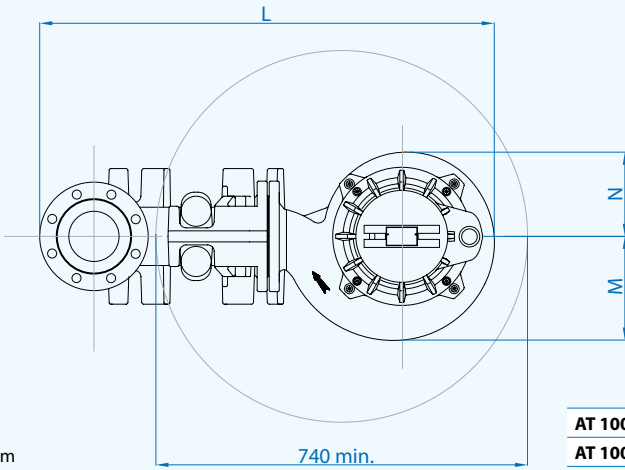
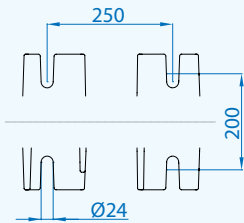
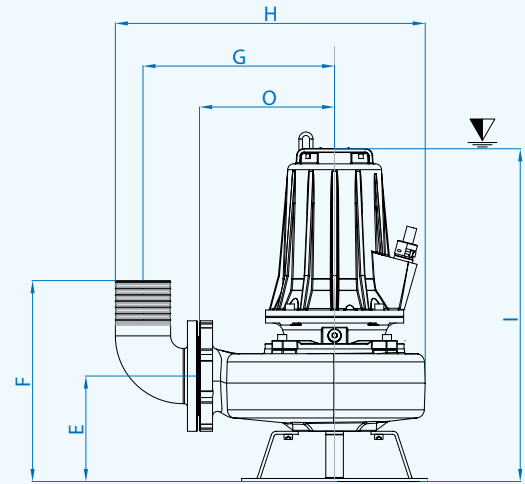
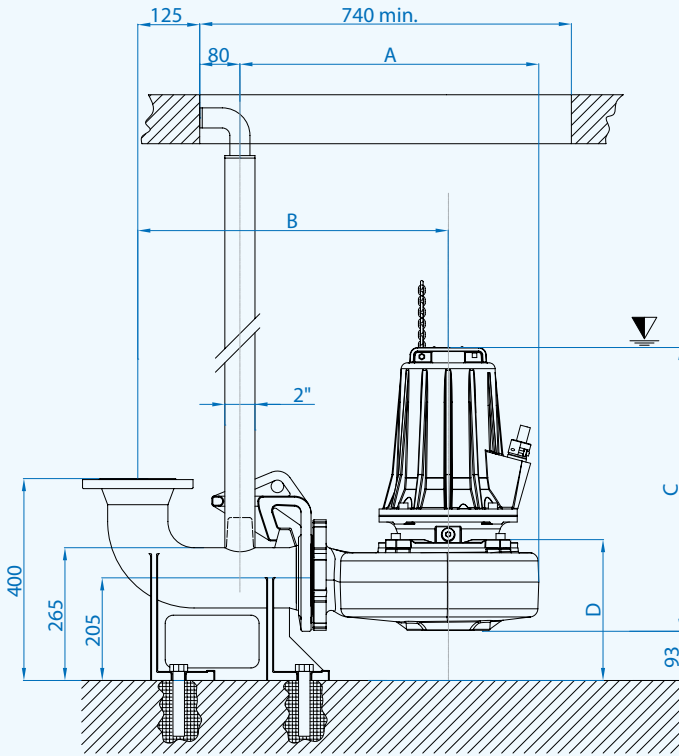
EPT 17 ATEX 2702 X



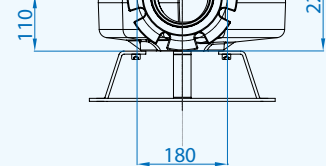
Ex db IIB T4 Gb
Ex h IIB T4 Gb
0° ≤ Ta ≤ 40°

A4

∇ Sommergenza minima
Minimum submersion



DN100 PN16
ex UNI 2278



Quote in mm
Dimensions in mm

	A	B	C	D	E	F	G	H	I	L	M	N	O
AT 100/4/152 C.243-244-245	549	592	486	249	210	398	355	573	586	864	189	149	242
AT 100/4/173 C.255-256	594	618	550	271	212	400	382	617	650	910	207	168	266

Cavi / Cables

Pompe Pumps	Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm ² Cable cross section mm ²	mt
100/4/152	Standard	3 ~ 400V	H07RN8F	4x1,5+3x0,50 Ø15*	10
	ATEX	D.O.L.	NSSHÖU-J	4x1,5+3x0,50 Ø17*	10
100/4/173	Standard	3 ~ 400V	H07RN8F	7x1,5+3x0,50 Ø17*	10
	ATEX	Y-Δ	NSSHÖU-J	7x1,5+3x0,50 Ø17*	10

* Terminali liberi - Free terminals

Dimensioni imballo / Packaging Dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 100/4/152 C.243	400	620	470	73
AT 100/4/152 C.244				73,5
AT 100/4/152 C.245				75,5
AT 100/4/173 C.255				103
AT 100/4/173 C.256				108

Technische Änderungen vorbehalten.
Subject to technical changes.

Accessori - Optional



Piede di accoppiamento rapido Tipo: DUTY 100 e B6
Automatic coupling foot
Type: DUTY 100 and B6



Curva flangiata portagomma N3
Base di sostegno P6
Flanged hose connection N3
Foot support P6



Manico inox
Stainless steel handle

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Date_06/02/20

Mandata Orizzontale DN150 PN16 - RPM 1450 1/min 4 poli

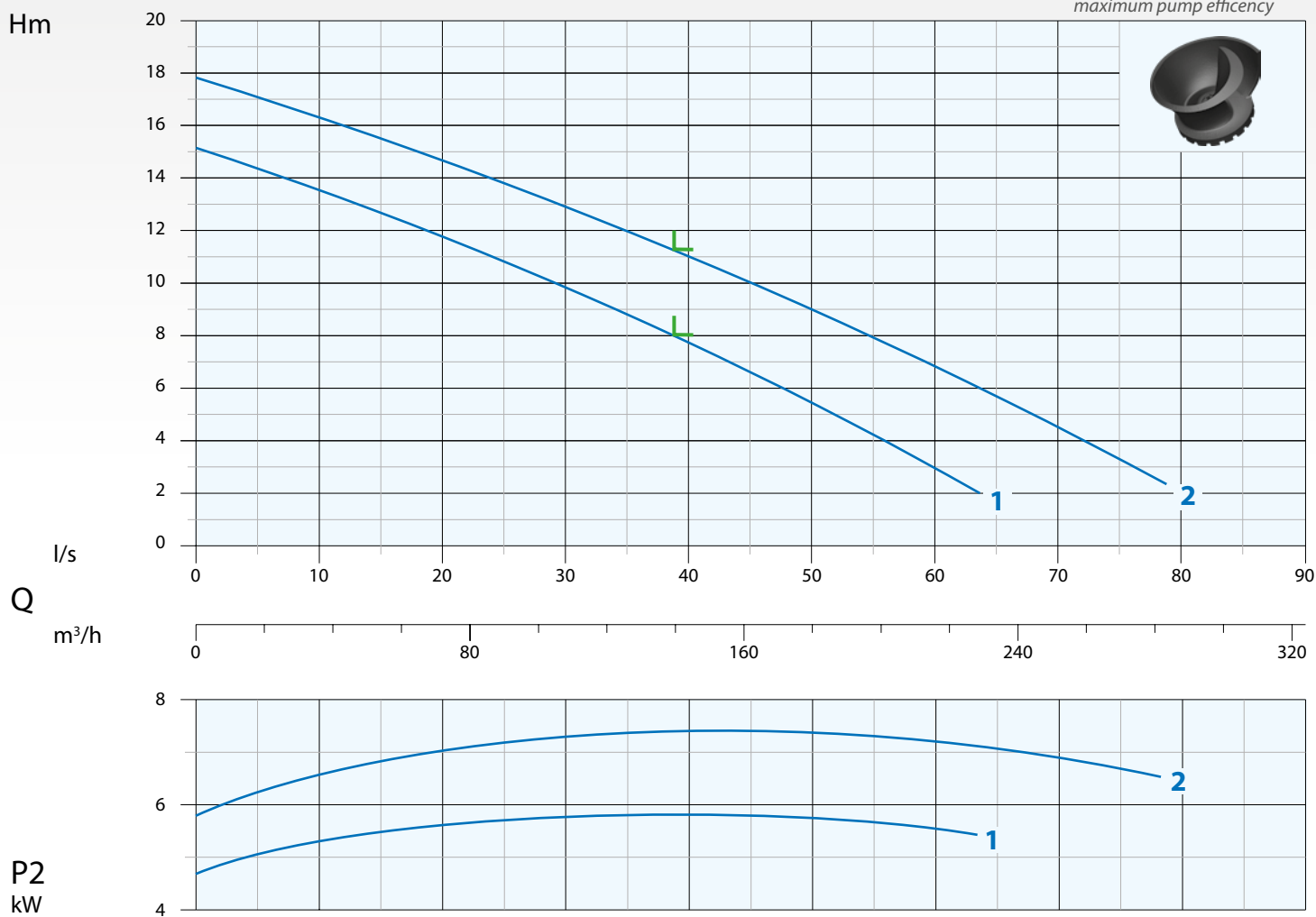
Horizontal Outlet DN150 PN16 - RPM 1450 1/min 4 poles

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Curva di Prestazione Performance Curve

L = rendimento massimo pompa
maximum pump efficiency



N°	Tipo Type		l/s	5	10	15	20	30	40	50	60	70	78
			l/m	300	600	900	1200	1800	2400	3000	3600	4200	4680
		m³/h	18	36	54	72	108	144	180	216	252	280,8	
1	AT 150/4/173 C.256	mt	14,5	13,5	12,5	12	10	7,5	5,5	3			
2	AT 150/4/173 C.258		17	16,5	15,5	14,5	13	11	9	7	4,5	2,2	

N°	Tipo Type	EX	Mandata Delivery	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A 3 Phase - 400V	Hz
					P1	P2				
1	AT 150/4/173 C.256		DN150 PN16	100 mm	6,8	5,8	7,9	1450	12,1	50
2	AT 150/4/173 C.258	•	DN150 PN16	100 mm	9,1	7,5	10	1450	15,6	50

• Pompa antideflagrante disponibile con certificazioni:
Available explosion proof pump with certifications:



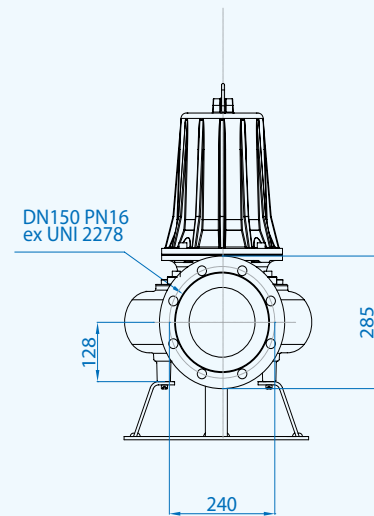
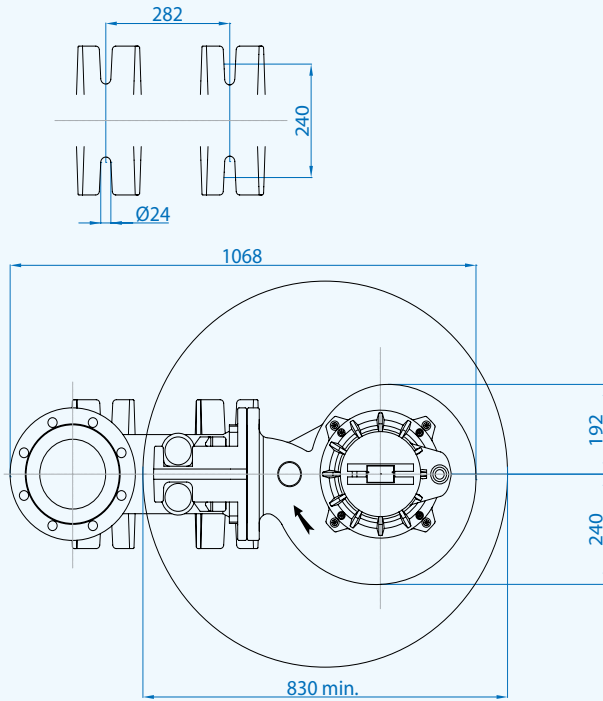
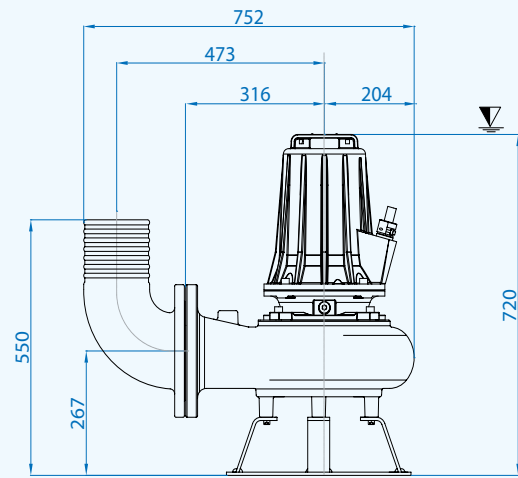
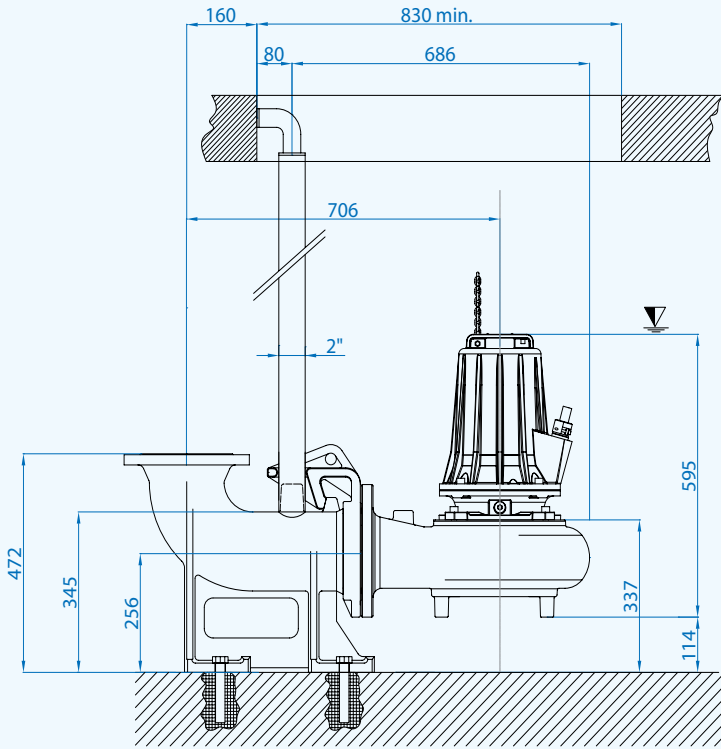
EPT 17 ATEX 2702 X



Ex db IIB T4 Gb
Ex h IIB T4 Gb
0° ≤ Ta ≤ 40°

A4

∇ Sommergenza minima
Minimum submersion



Quote in mm
Dimensions in mm

Cavi / Cables

Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm ² Cable cross section mm ²	mt
Standard	3 ~ 400V	H07RN8F	7x1,5+3x0,50 Ø17*	10
ATEX	Y-Δ	NSSHÖU-J	7x1,5+3x0,50 Ø17*	10

* Terminali liberi - Free terminals

Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 150/4/173 C.256	430	640	540	131
AT 150/4/173 C.258				132,5

Accessori - Optional



Piede di accoppiamento rapido Tipo: B7
Automatic coupling foot
Type: B7



Curva flangiata portagomma N4
Base di sostegno P7
Flanged hose connection N4
Foot support P7



Manico inox
Stainless steel handle

Technische Änderungen vorbehalten.
Subject to technical changes.