

A 4 POLES
POLES
SUBMERSIBLE PUMPS



Elettropompe sommergibili con girante monocanale chiuso

Submersible electropumps with close channel impeller

Potenze / Power:	10÷55 kW
Mandate / Delivery:	DN150



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: 400V - 690V ±5%
- 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

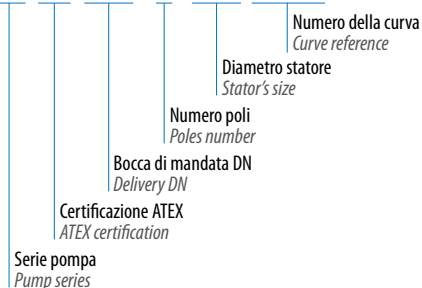
The cooling of the motor is ensured by the liquid where the pump is submerged.

Limits of use

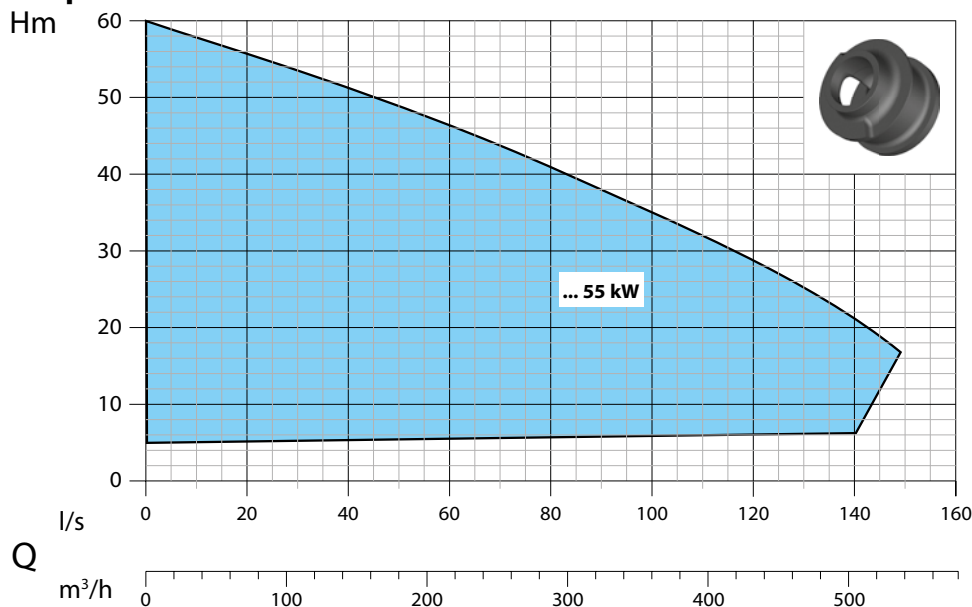
- Max. permissible liquid temperature: 40°C with pump fully submerged
- On request, special version (excluded ATEX) to withstand liquid temperature up to 60°C with pump fully submerged, no S1 service
- Maximum depth of immersion: 20 mt.
- Permissible pH value: 6-10
- Hydraulic features suitable for liquids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

Designazione / Designation

AT-EX 150 / 4 / 240 C.275



Campo di Prestazione / Performance Overview



Identificazione Curve

Curves Identification

■ DN150

Normative

Norms

Curve secondo ISO 9906 livello 2
According to ISO 9906 level 2

Distinta dei componenti e materiali

List of components and materials

Golfare - Hook

Acciaio inox AISI 416 - Stainless steel AISI 416

Porta cuscinetto superiore - Upper bearing support

Ghisa GG25 - Cast iron GG25

Cassa motore - Motor casing

Ghisa GG25 - Cast Iron GG25

Cuscinetto superiore - Upper bearing

Albero motore - Motor shaft

Acciaio inox AISI 420 - stainless steel 420

Motore elettrico - Electric motor

Rotore - Rotor

Cuscinetto inferiore - Lower bearing

Porta motore - Motor holder

Ghisa GG25 - Cast iron GG25

Tenuta meccanica - Mechanical seal

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

Disco di chiusura - Closing plate

Ghisa GG25 - Cast iron GG25

Tenuta meccanica - Mechanical seal

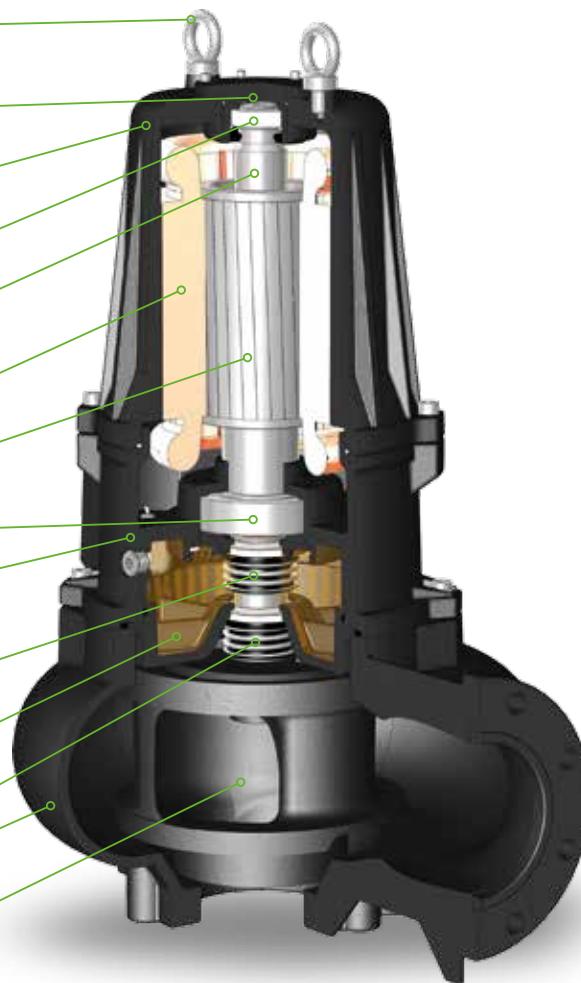
Carburo di silicio - Silicon/Carbide (SiC/SiC/Viton)

Corpo pompa - Body pump

Ghisa GG25 - Cast iron GG25

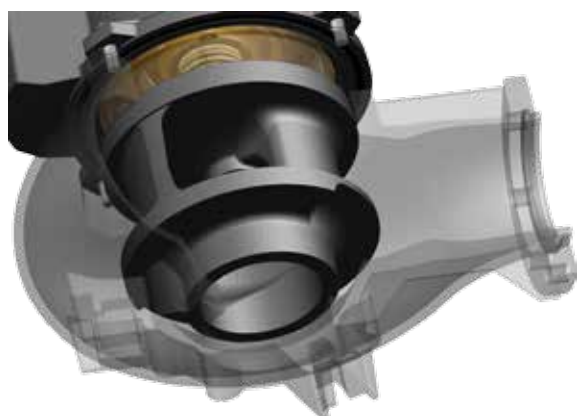
Girante - Impeller

Ghisa GG25 - Cast iron GG25



Tecnologie e Soluzioni

Technology and Features



Giranti

La serie monta giranti Monocanali Chiusi ad alte prestazioni. Gli ampi passaggi permettono il passaggio di corpi solidi fino a 130mm

Impellers

This range of pump features close double channel impeller with excellent performance and free passage of solids up to 130 mm.



Pompe antideflagranti / Explosion proof pumps

CE 0477 Ex II 2 G EX db k IIB T4 X 0°C ≤ Ta ≤ 40°C
EX db IIB T4 X 0°C ≤ Ta ≤ 40°C



I presenti certificati garantiscono la sicurezza contro le esplosioni, in assoluta conformità con le stringenti direttive europee ed internazionali ATEX/IECEx.

These certificates grant for the safe use of the product in hazardous area in line with the stringent European and International standards ATEX/IECEx.



Sensore d'umidità

Sensore conforme alle norme sulla sicurezza integrata contro le esplosioni EN 60079-0, EN 60079-1 tramite barriera di protezione. Di serie su tutta la gamma (non applicabile con IECEx).

Seal leak detector

The seal leak detector is certified according to the norm through safety barrier EN 60079-0, EN 60079-1 and fitted. Standard on all series (not applicable with IECEx).



Cuscinetti

La serie monta il cuscinetto superiore a rulli cilindrici, atto ad assorbire e resistere ad eventuali sollecitazioni trasmesse dall'albero motore.

Bearings

The series is fitted with a cylindrical roller bearing (upper bearing) to absorb the thrust and vibration generated by the pump shaft.

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

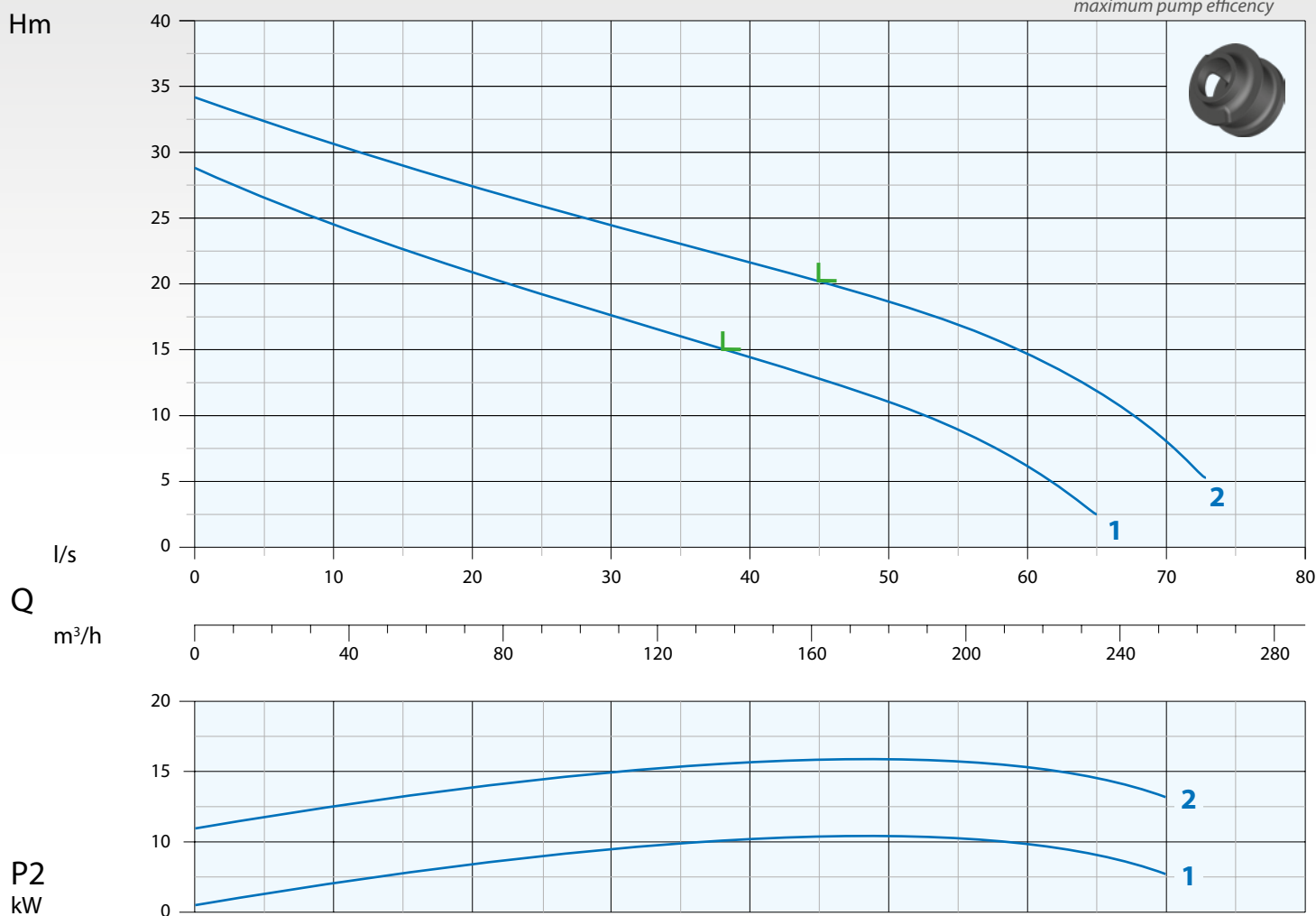
Horizontal Outlet DN150 PN16 - RPM 1450 1/min 4 poles

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Curva di Prestazione
Performance Curve

L = rendimento massimo pompa
maximum pump efficiency

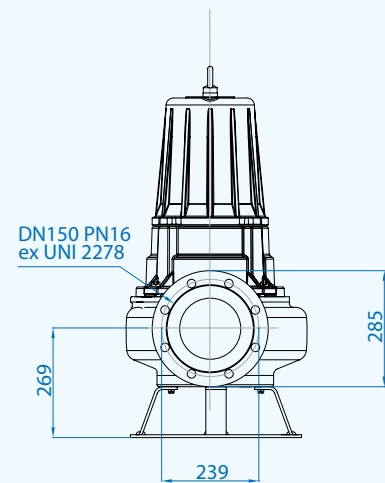
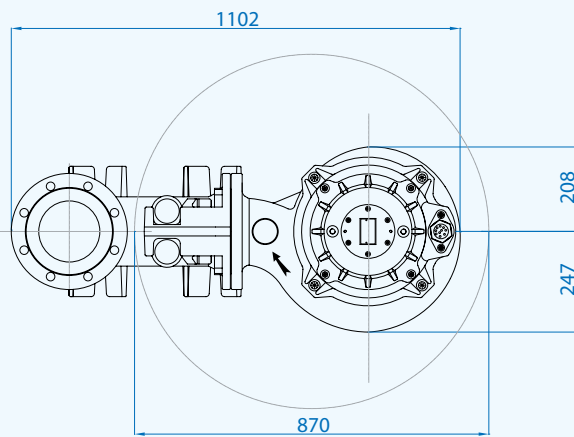
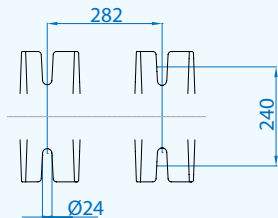
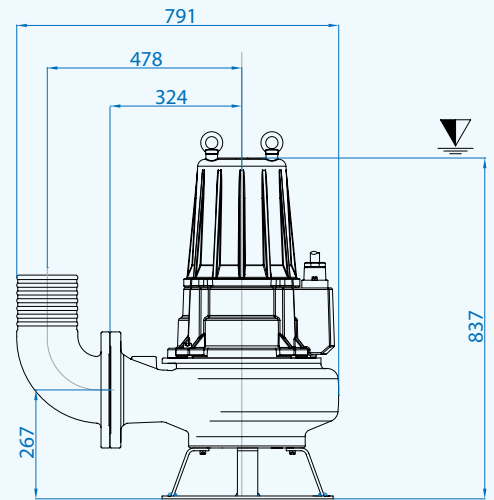
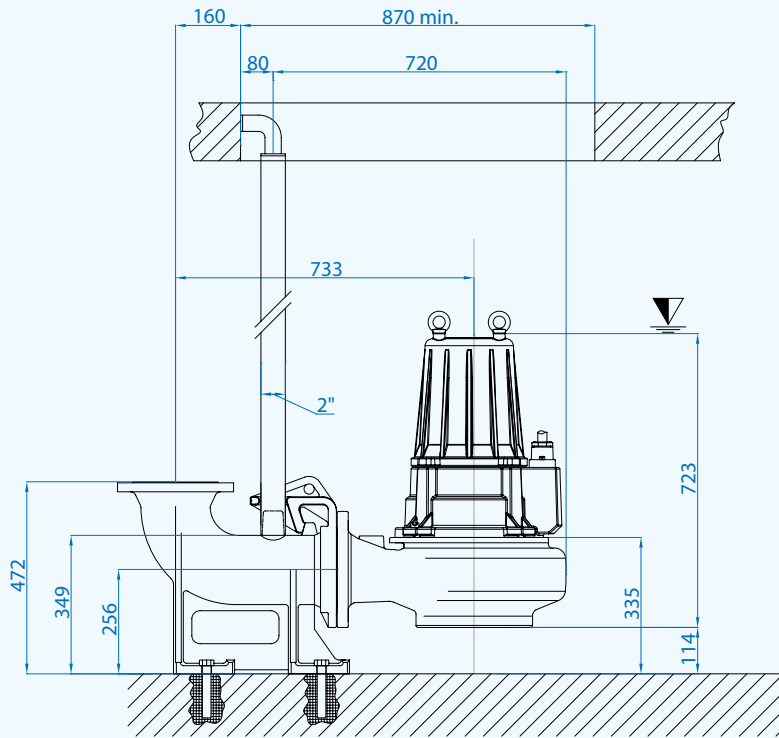


N°	Tipo Type	l/s	5	10	15	20	25	30	40	50	60	70
		l/m	300	600	900	1200	1500	1800	2400	3000	3600	4200
		m³/h	18	36	54	72	90	108	144	180	216	252
1	AT 150/4/200 C.260	mt	26,5	24	22,5	21	19	17,5	14,5	11	6	
2	AT 150/4/200 C.263	mt	32,5	31	28,5	27,5	26,5	24	21,5	18,5	15	7,5

N°	Tipo Type	EX	Mandata Delivery	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A		
					P1	P2			3 Phase - 400V		Hz
1	AT 150/4/200 C.260	•	DN150 PN16	80 mm	11,5	10	13,5	1450	21,3		50
2	AT 150/4/200 C.263	•			18,8	16,5	22,5		33,2		

• Pompa antideflagrante disponibile con certificazioni: II 2 G EX db k IIB T4 X 0°C ≤ Ta ≤ 40°C
Available explosion proof pump with certifications: EX db IIB T4 X 0°C ≤ Ta ≤ 40°C

▼ Sommergenza minima
Minimum submersion



Cavi / Cables

Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm ² Cable cross section mm ²	mt
Standard	3 ~ 400V	H07RN8F	10x2,5 Ø 23*	10
ATEX	Y-Δ	NSSHÖU-J	7x2,5+3x0,50 Ø 20*	10

* Terminali liberi - Free terminal

Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 150/4/200 C.260				226
AT 150/4/200 C.263	570	950	670	235



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

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

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

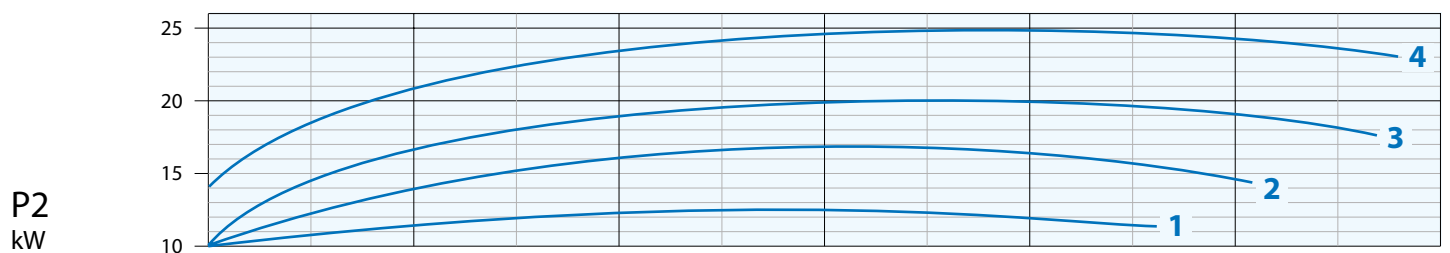
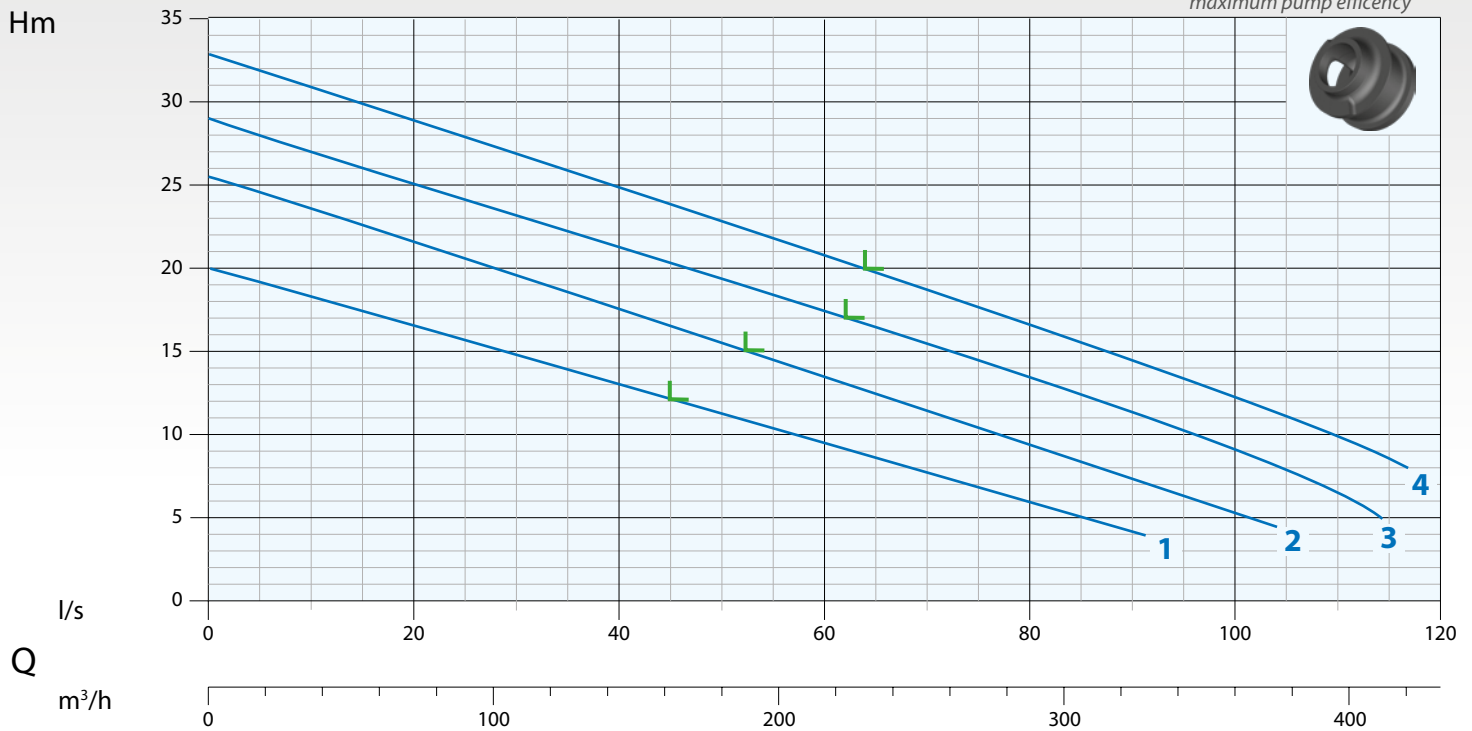
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Curva di Prestazione

Performance Curve

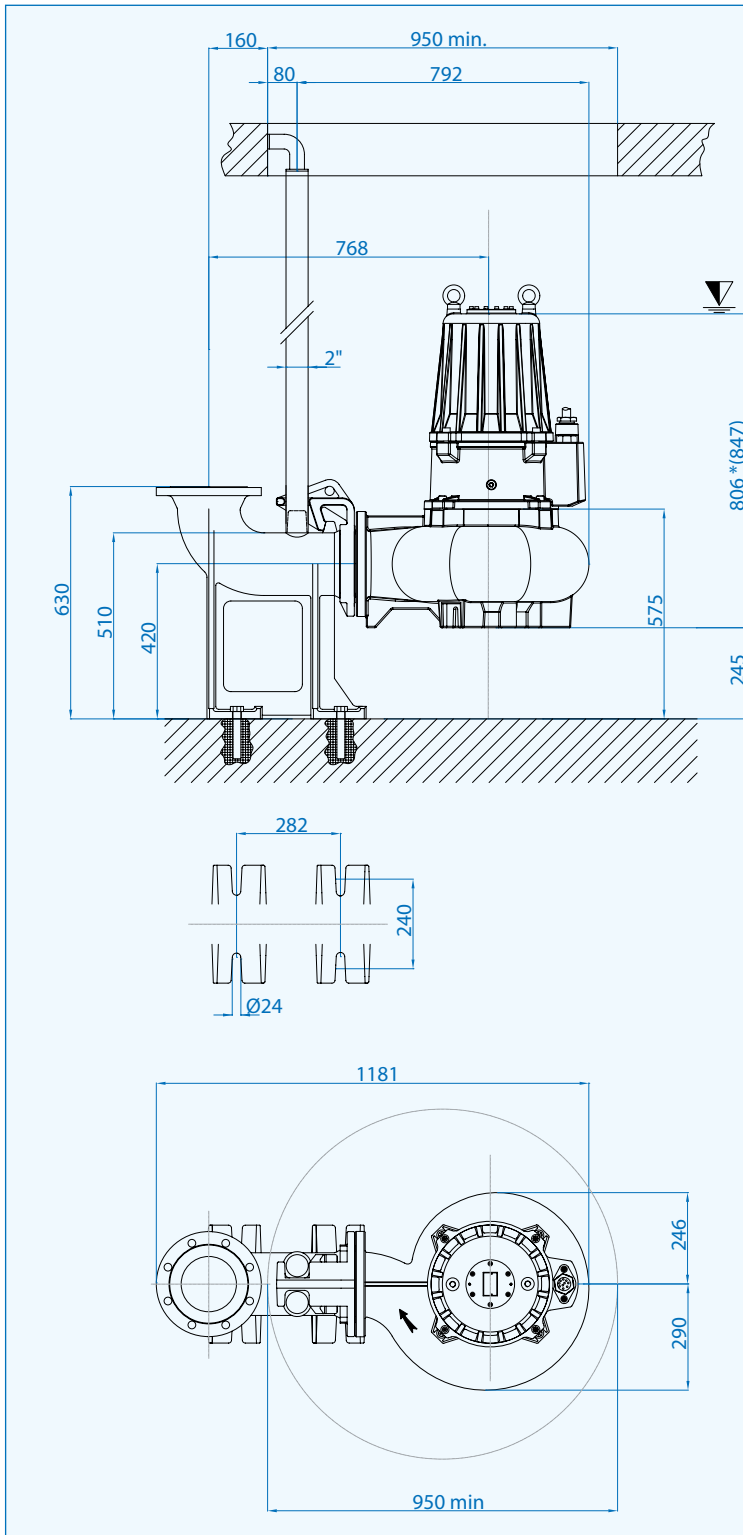
L = rendimento massimo pompa
maximum pump efficiency



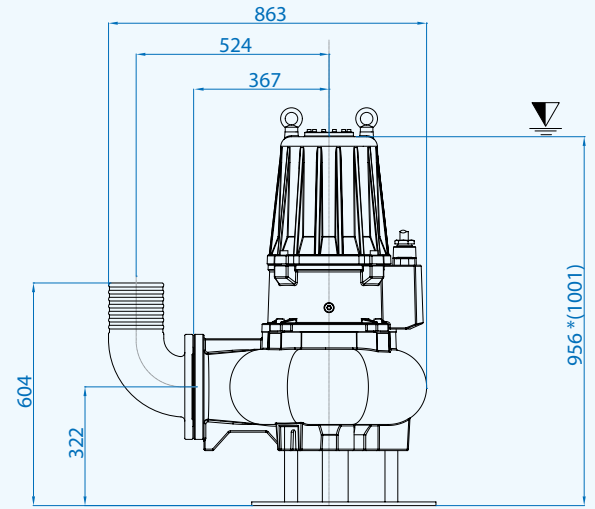
N°	Tipo Type	I/s l/m m³/h	10	20	30	40	50	60	70	80	90	110
			36	72	108	144	180	216	252	288	324	396
1	AT 150/4/200 C.264	mt	18	16,5	15	13	11	9,5	7,5	6	4	
2	AT 150/4/200 C.265		23,5	21,5	19,5	17,5	15,5	13,5	11,5	9,5	7	
3	AT 150/4/240 C.275		27	25	23	21	19,5	17,5	15,5	13,5	11	6,5
4	AT 150/4/240 C.280		31	29	27	25	23	21	18,5	16,5	14,5	10

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 150/4/200 C.264	•	DN150 PN16	110 mm	13,8	12	16	1450	23,4	50
2	AT 150/4/200 C.265	•			17,6	16	22		31,8	
3	AT 150/4/240 C.275	•		120 mm	20,3	20	27		39,7	
4	AT 150/4/240 C.280	•			25,8	25	34		47,7	

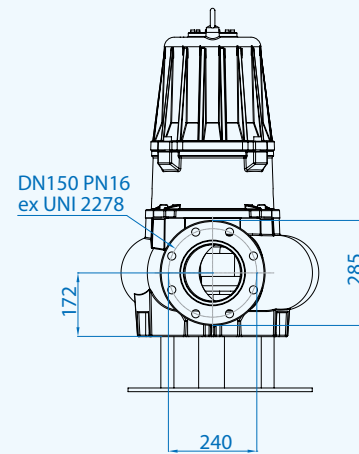
• Pompa antideflagrante disponibile con certificazioni: II 2 G EX db k IIB T4 X 0°C ≤ Ta ≤ 40°C
Available explosion proof pump with certifications: EX db IIB T4 X 0°C ≤ Ta ≤ 40°C



▽ Sommergenza minima
Minimum submersion



* (AT 150/4/240 C.275-280)



Cavi / Cables

Pompe Pumps	Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm ² Cable cross section mm ²	mt
150/4/200	Standard	3 ~ 400V	H07RN8F	10x2,5 Ø23*	10
	ATEX	Y-Δ	NSSHÖU-J	7x2,5+3x0,50 Ø20*	10
150/4/240	Standard	3 ~ 400V	H07RN8F	7x4+3x1 Ø20,5*	10
	ATEX	Y-Δ	NSSHÖU-J	7x6+3x1 Ø24*	10

* Terminali liberi - Free terminal

Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 150/4/200 C.264				260
AT 150/4/200 C.265				272
AT 150/4/240 C.275	570	950	670	308
AT 150/4/240 C.280				320

Accessori - Optional



Piede di accoppiamento rapido Tipo: B8
Automatic coupling foot
Type: B8



Curva flangiata portagomma N4
Base di sostegno P8
Flanged hose connection N4
Foot support P8

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

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

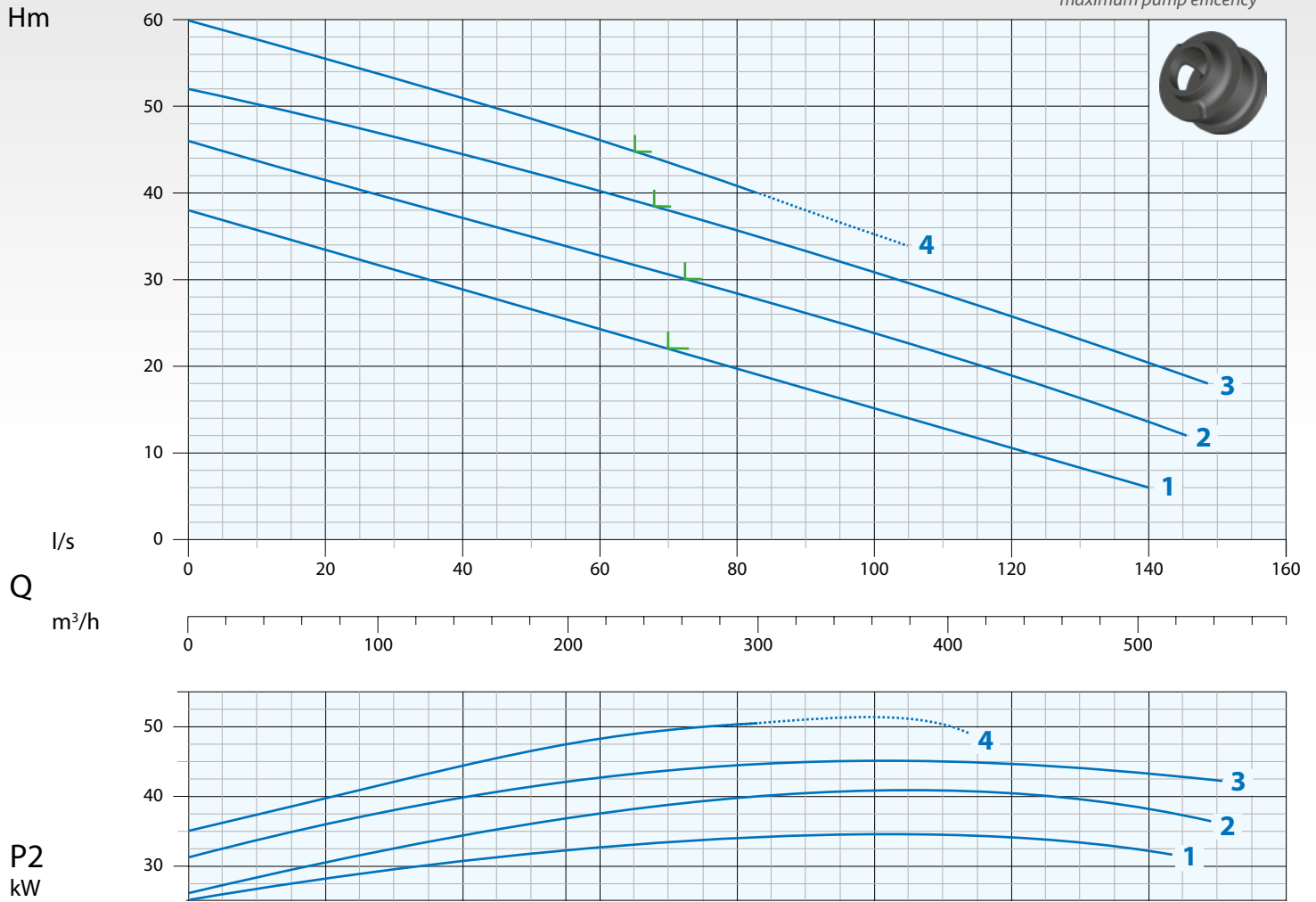
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Curva di Prestazione

Performance Curve

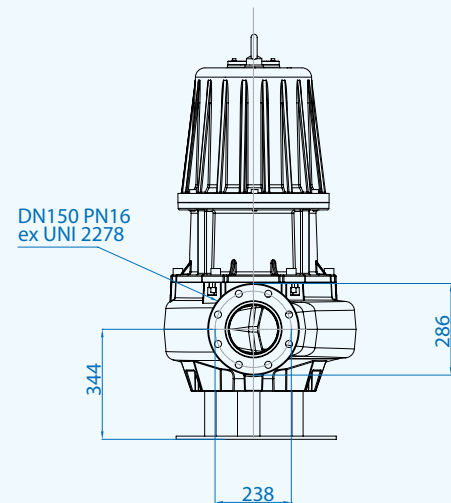
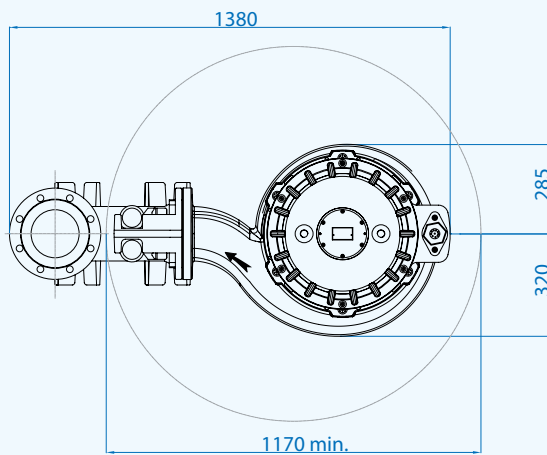
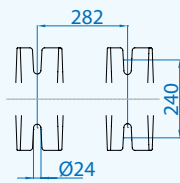
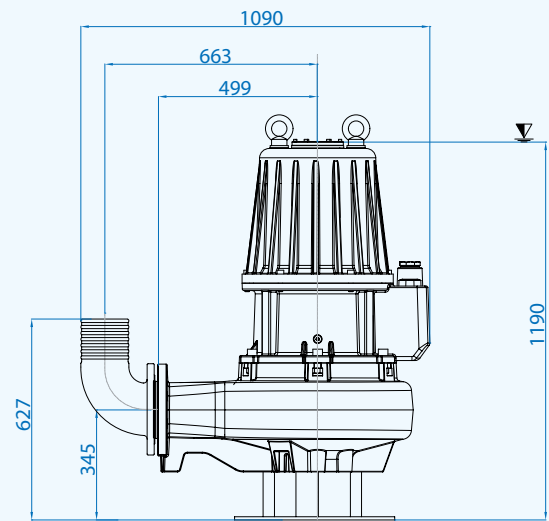
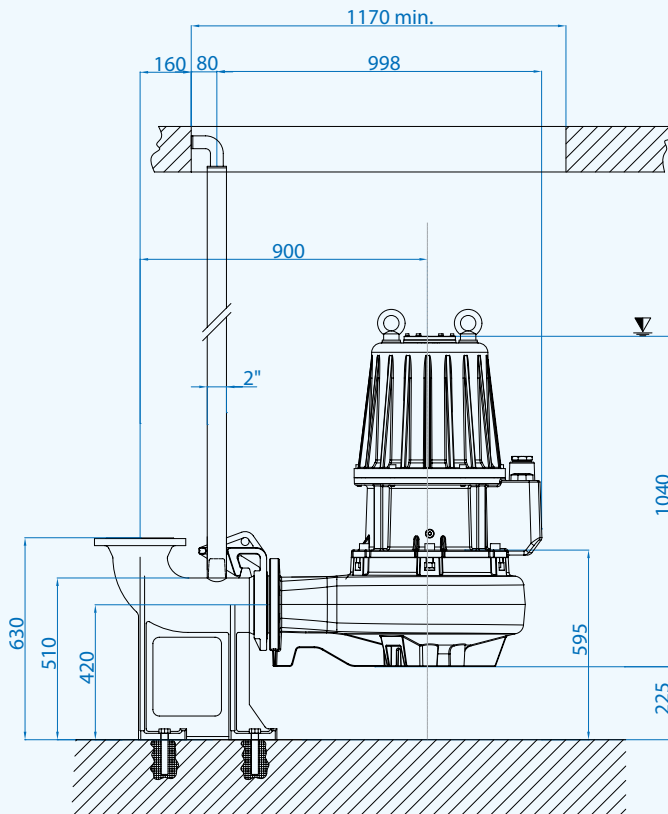
L = rendimento massimo pompa
maximum pump efficiency



N°	Tipo Type	l/s l/m m³/h	10	20	30	40	50	60	80	100	120	140
			600	1200	1800	2400	3000	3600	4800	6000	7200	8400
1	AT 150/4/340 C.285	mt	36	34	31	29	26	24	20	15	10	6
2	AT 150/4/340 C.290		44	42	39	37	35	33	28	24	19,5	14
3	AT 150/4/340 C.295		50	48	46	44	42	40	36	31	26	20
4	AT 150/4/340 C.300		58	56	53	51	48	46	41			

N°	Tipo Type	Mandata Delivery	Passaggio Free Passage	kW			R.P.M. 1/min	A 3 Phase - 400V	Hz
				P1	P2	HP			
1	AT 150/4/340 C.285	DN150 PN16	110 mm	37,5	35	47	1450	68	50
2	AT 150/4/340 C.290		120 mm	44,2	40	54		75,3	
3	AT 150/4/340 C.295		130 mm	48,5	45	61		92,2	
4	AT 150/4/340 C.300		140 mm	59,6	55	68		99,6	

▼ Sommergenza minima
Minimum submersion



Cavi / Cables

Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm ² Cable cross section mm ²	mt
Standard	3 ~ 400V Y-Δ	H07RN8F	7x10+5x1 Ø29*	10

* Terminali liberi - Free terminal

Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 150/4/340 C.285	900	1150	650	550
AT 150/4/340 C.290				585
AT 150/4/340 C.295				590
AT 150/4/340 C.300				610



Accessori - Optional



Piede di accoppiamento rapido Tipo: B8
Automatic coupling foot
Type: B8



Curva flangiata portagomma N4
Base di sostegno P8
Flanged hose connection N4
Foot support P8