

## Elettropompe sommergibili con girante monocanale chiuso

### Submersible electropumps with close channel impeller

Potenze / Power:	<b>10÷60 kW</b>
Mandate / Delivery:	<b>DN150 - 200</b>



#### Impieghi

La serie A4 - A6 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 al 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 - 6 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/dm<sup>3</sup>
- Tensioni ammesse: 400V / 690V ±5%
- Frequenza ammessa: 50Hz ± 2%

#### Application

The A4 - A6 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 - 6 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

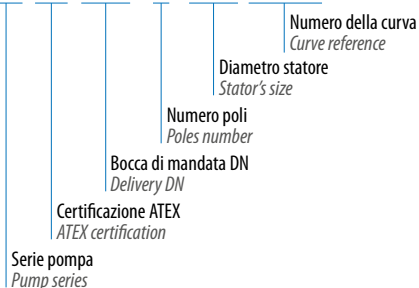
The cooling of the motor is ensured by the liquid where the pump is submerged.

#### Limits of use

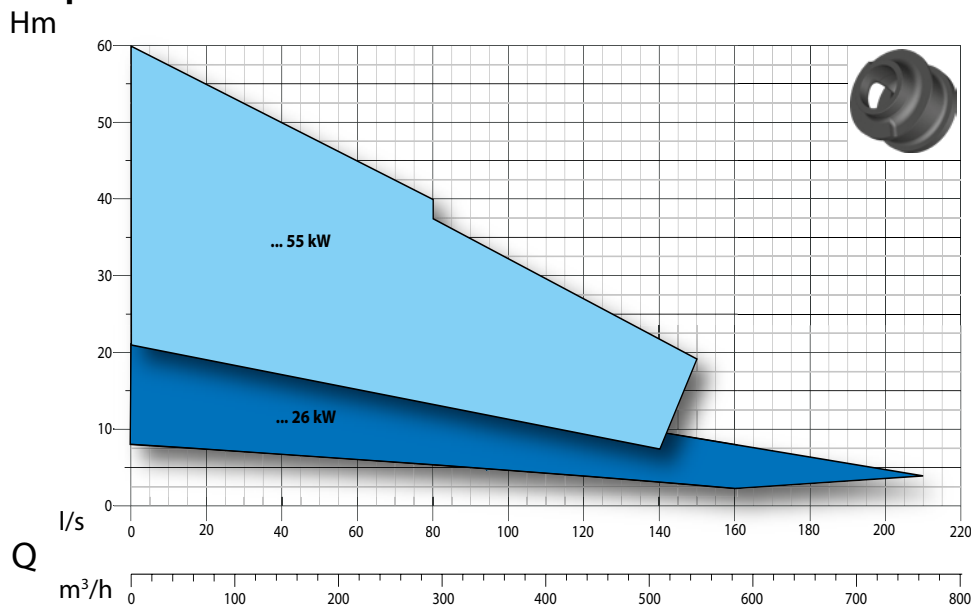
- Max. permissible liquid temperature: 40°C with pump fully submerged
- On request, special version (excluded ATEX) to withstand liquid temperature up to 60°C with pump fully submerged, no S1 service
- Maximum depth of immersion: 20 mt.
- Permissible pH value: 6-10
- Hydraulic features suitable for liquids with density <1,1 kg/dm<sup>3</sup>
- 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
- DN200

### 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-A6

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

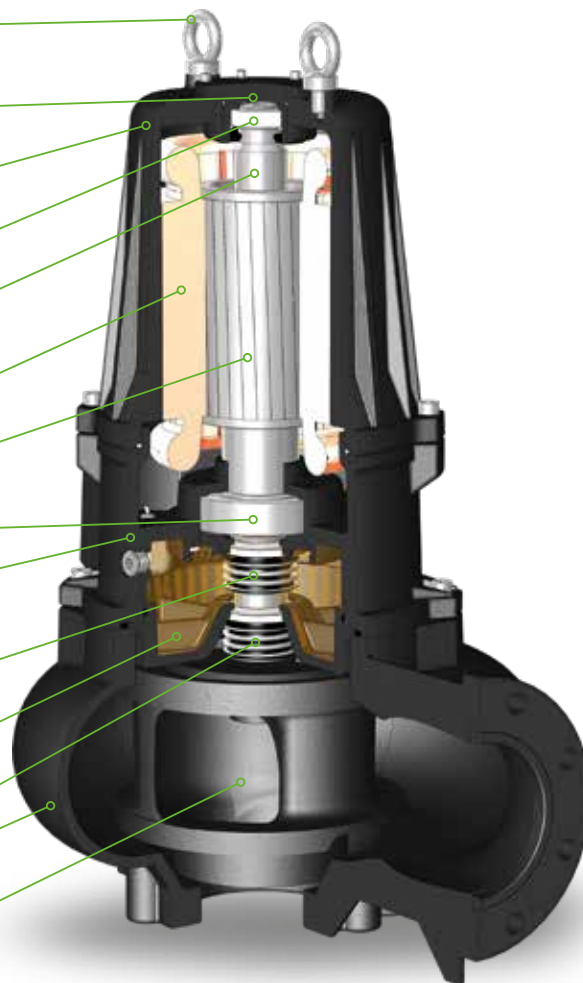
Carburo di silicio - Silicon/Carbide (SiC/SiC/Viton)

Corpo pompa - Body pump

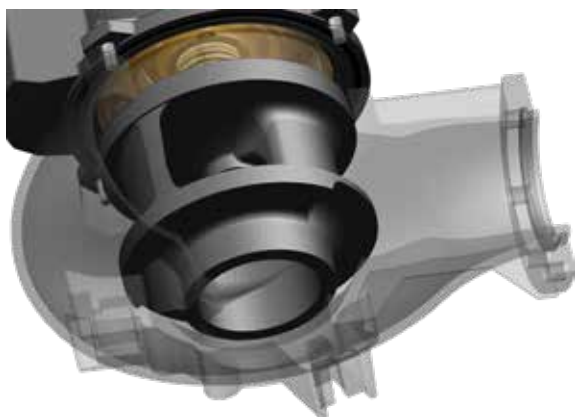
Ghisa GG25 - Cast iron GG25

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

EPT 17 ATEX 2703 X



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 EN 60079-0, EN 60079-1 (through safety barrier) 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

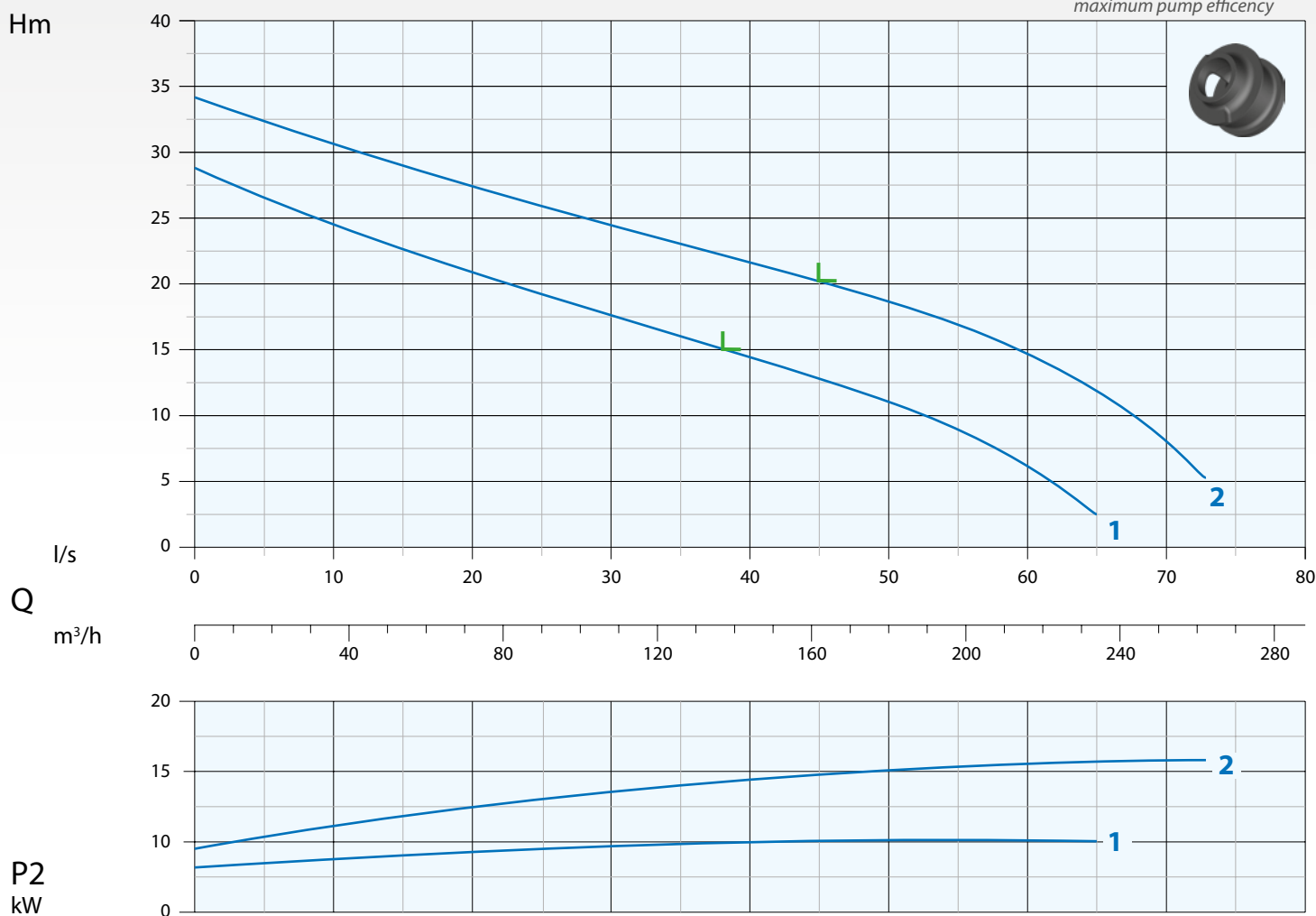
Horizontal Outlet DN150 PN16 - RPM 1450 1/min 4 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



### 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	11,7	10	13,5	1450	21,3		50
2	AT 150/4/200 C.263	•			18,7	16	22,5		33,2		

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



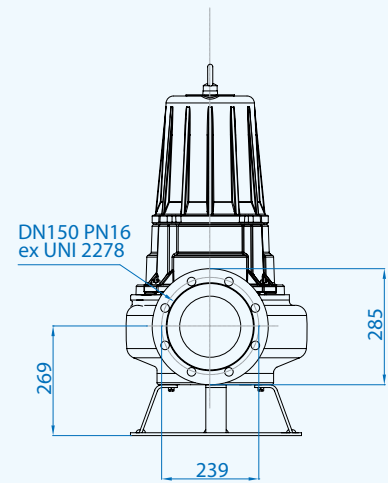
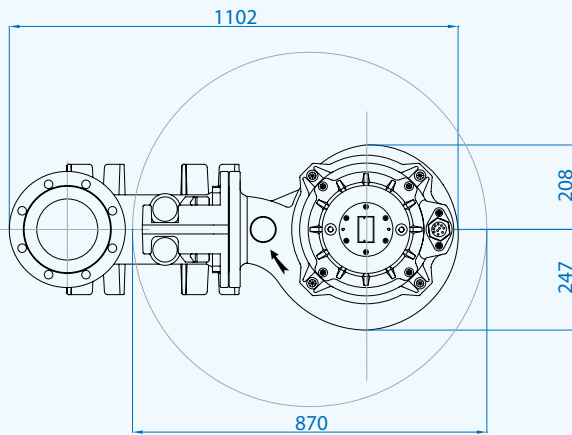
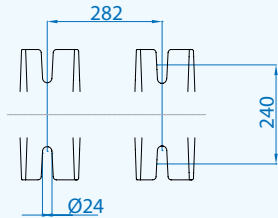
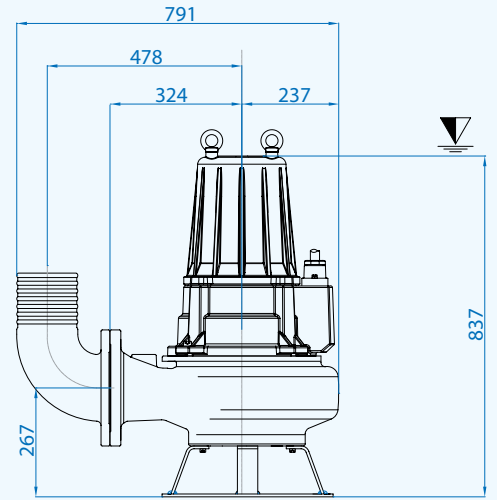
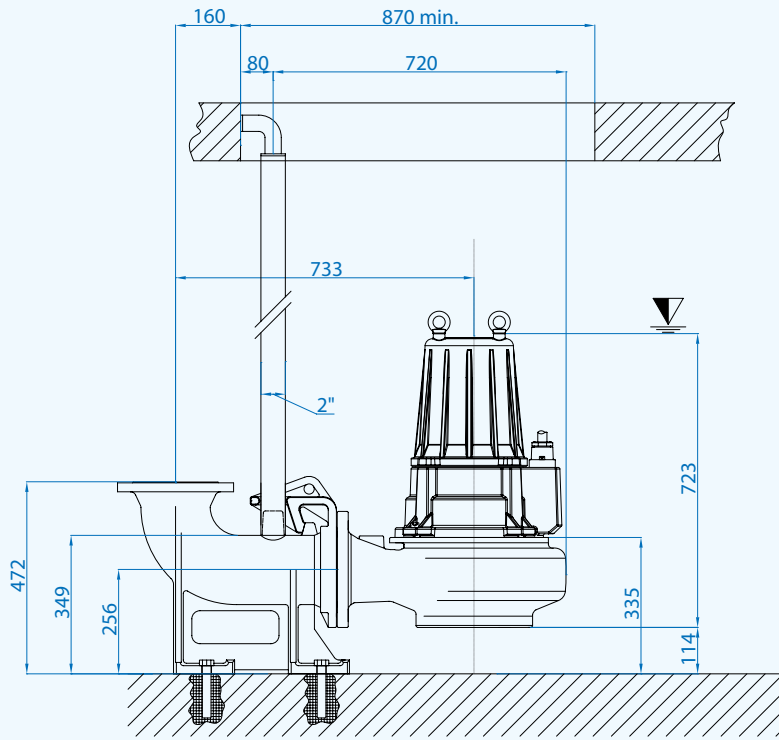
EPT 17 ATEX 2703 X



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 <sup>2</sup> Cable cross section mm <sup>2</sup>	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 terminals

### Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 150/4/200 C.260				230
AT 150/4/200 C.263	570	950	670	256



### 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

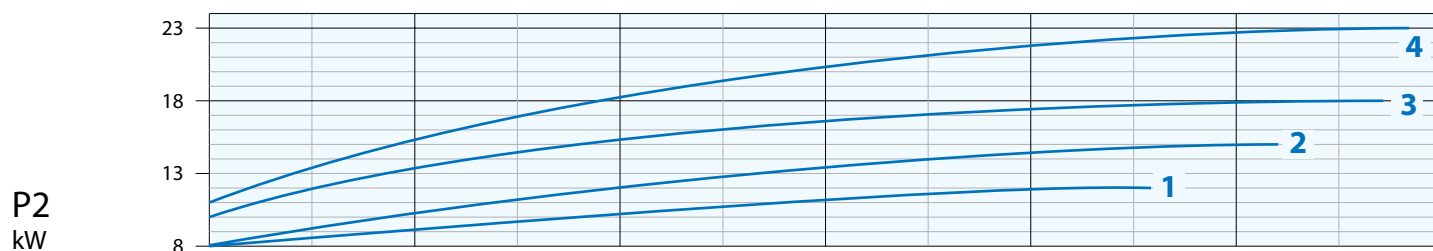
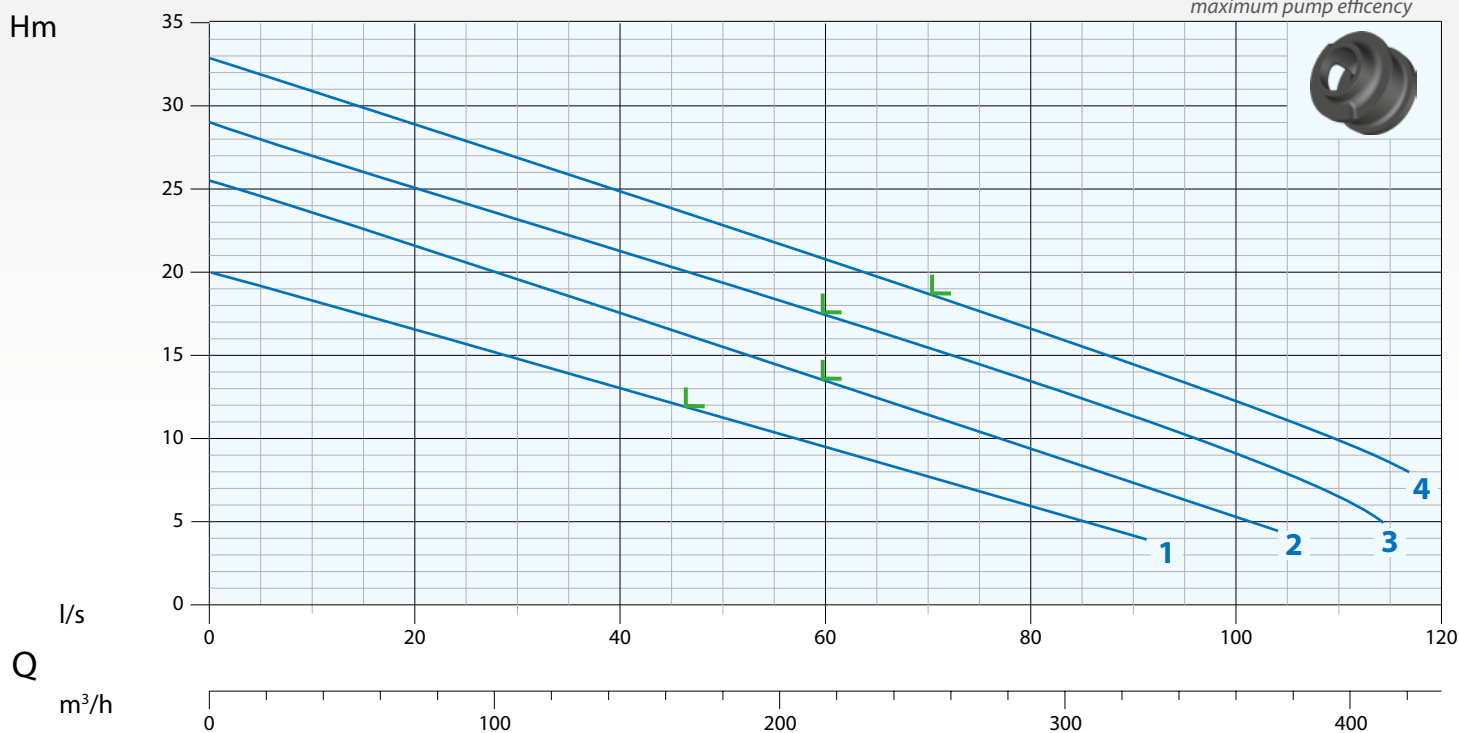
Horizontal Outlet DN150 PN16 - RPM 1450 1/min 4 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



## 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	12,8	11	16	1450	23,4	50
2	AT 150/4/200 C.265	•			17,6	15	22		31,8	
3	AT 150/4/240 C.275	•		120 mm	20,3	18	24		39,7	
4	AT 150/4/240 C.280	•			25,9	23	31		47,7	

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



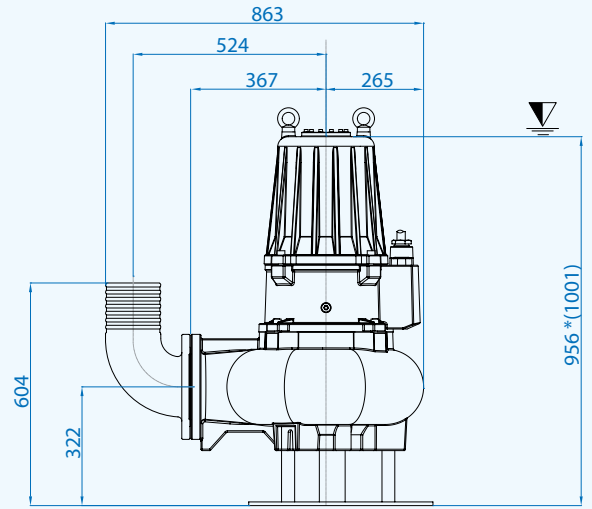
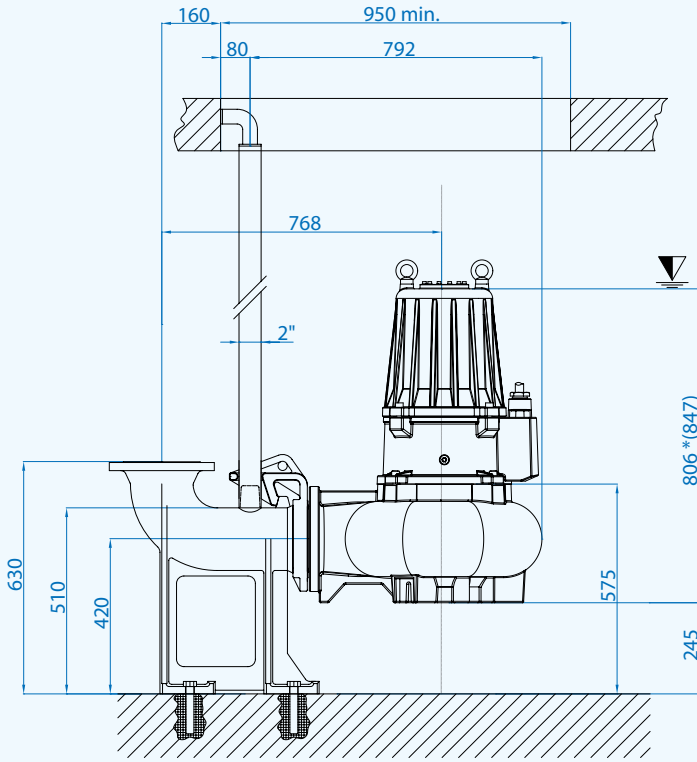
EPT 17 ATEX 2703 X



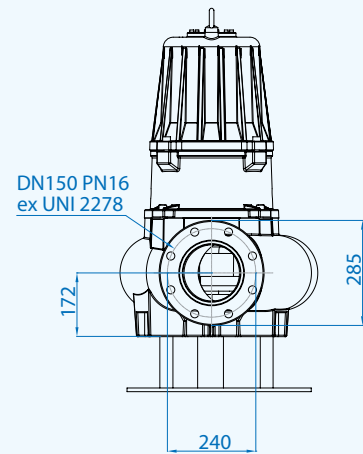
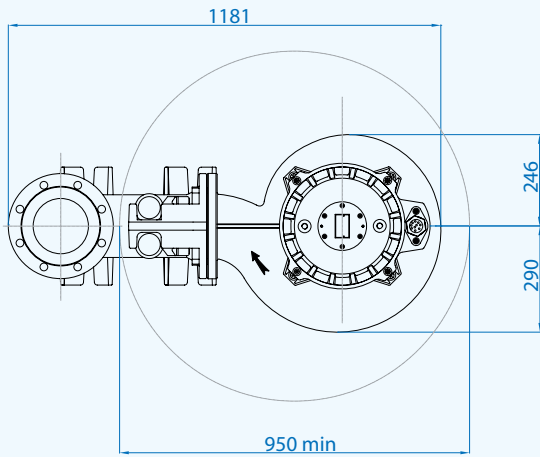
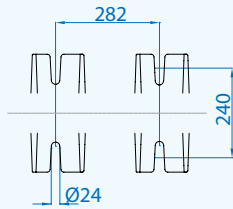
Ex db IIB T4 Gb  
Ex h IIB T4 Gb  
0° ≤ Ta ≤ 40°

# A4

∇ Sommergenza minima  
Minimum submersion



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



Quote in mm  
Dimensions in mm

### Cavi / Cables

Pompe Pumps	Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm <sup>2</sup> Cable cross section mm <sup>2</sup>	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 terminals

### 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				276
AT 150/4/240 C.275	570	950	670	308
AT 150/4/240 C.280				328



### 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

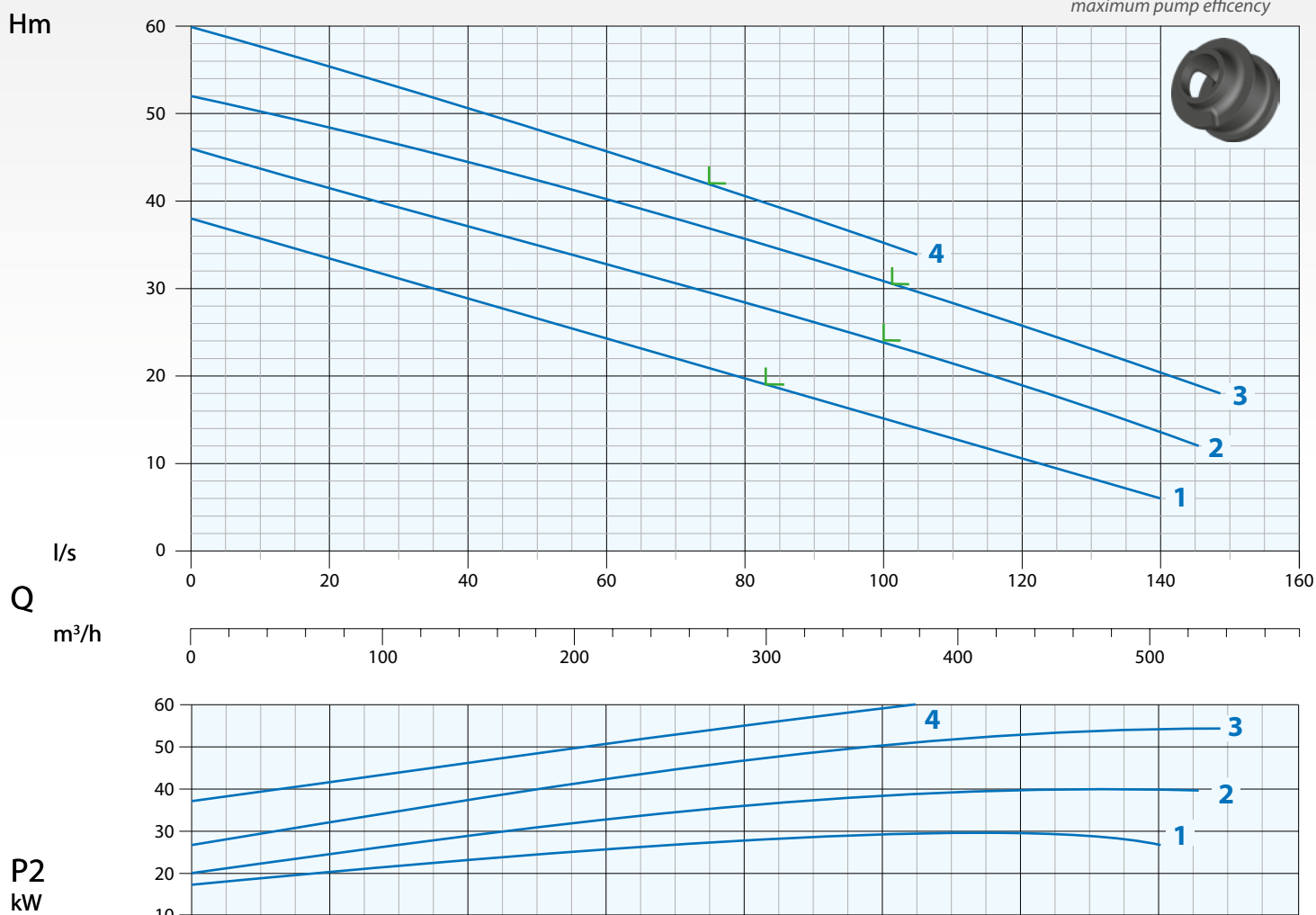
Horizontal Outlet DN150 PN16 - RPM 1450 1/min 4 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



## Curva di Prestazione Performance Curve

L = rendimento massimo pompa  
maximum pump efficiency

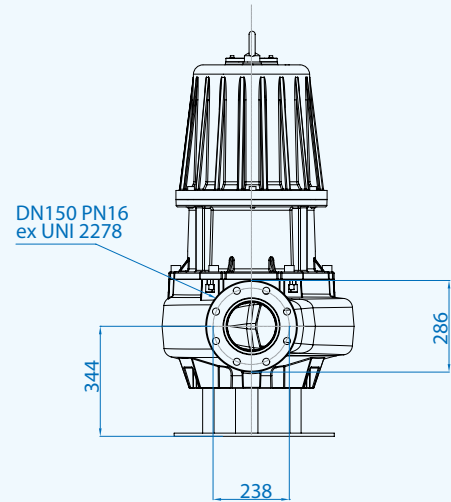
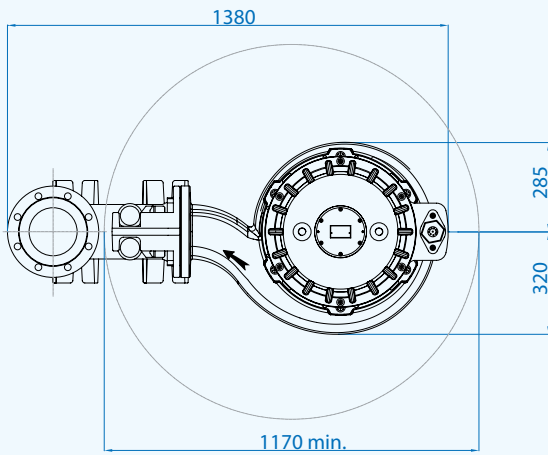
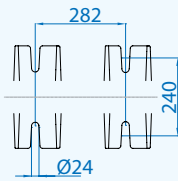
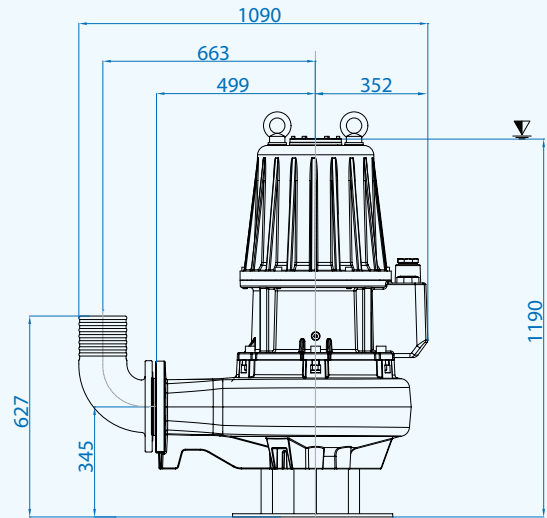
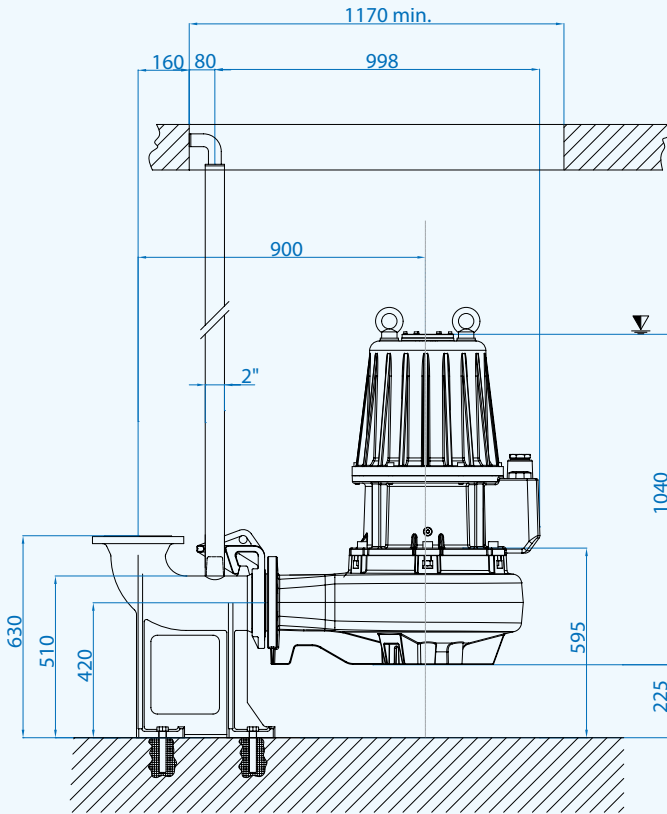


N°	Tipo Type	l/s l/m m³/h	10	20	30	40	50	60	80	100	120	140
			600	1200	1800	2400	3000	3600	4800	6000	7200	8400
1	AT 150/4/340 C.285	mt	36	34	31	29	26	24	20	15	10	6
2	AT 150/4/340 C.290		44	42	39	37	35	33	28	24	19,5	14
3	AT 150/4/340 C.295		50	48	46	44	42	40	36	31	26	20
4	AT 150/4/340 C.300		58	56	53	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	33	30	40	1450	59	50
2	AT 150/4/340 C.290		120 mm	42	40	53,5		73,1	
3	AT 150/4/340 C.295		130 mm	54,6	51	61		98,6	
4	AT 150/4/340 C.300		140 mm	64	60	68		108,6	

# A4

∇ Sommergenza minima  
Minimum submersion



Quote in mm  
Dimensions in mm

### Cavi / Cables

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

\* Terminali liberi - Free terminals

### Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 150/4/340 C.285	980	1310	730	550
AT 150/4/340 C.290				585
AT 150/4/340 C.295				600
AT 150/4/340 C.300				600



### 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



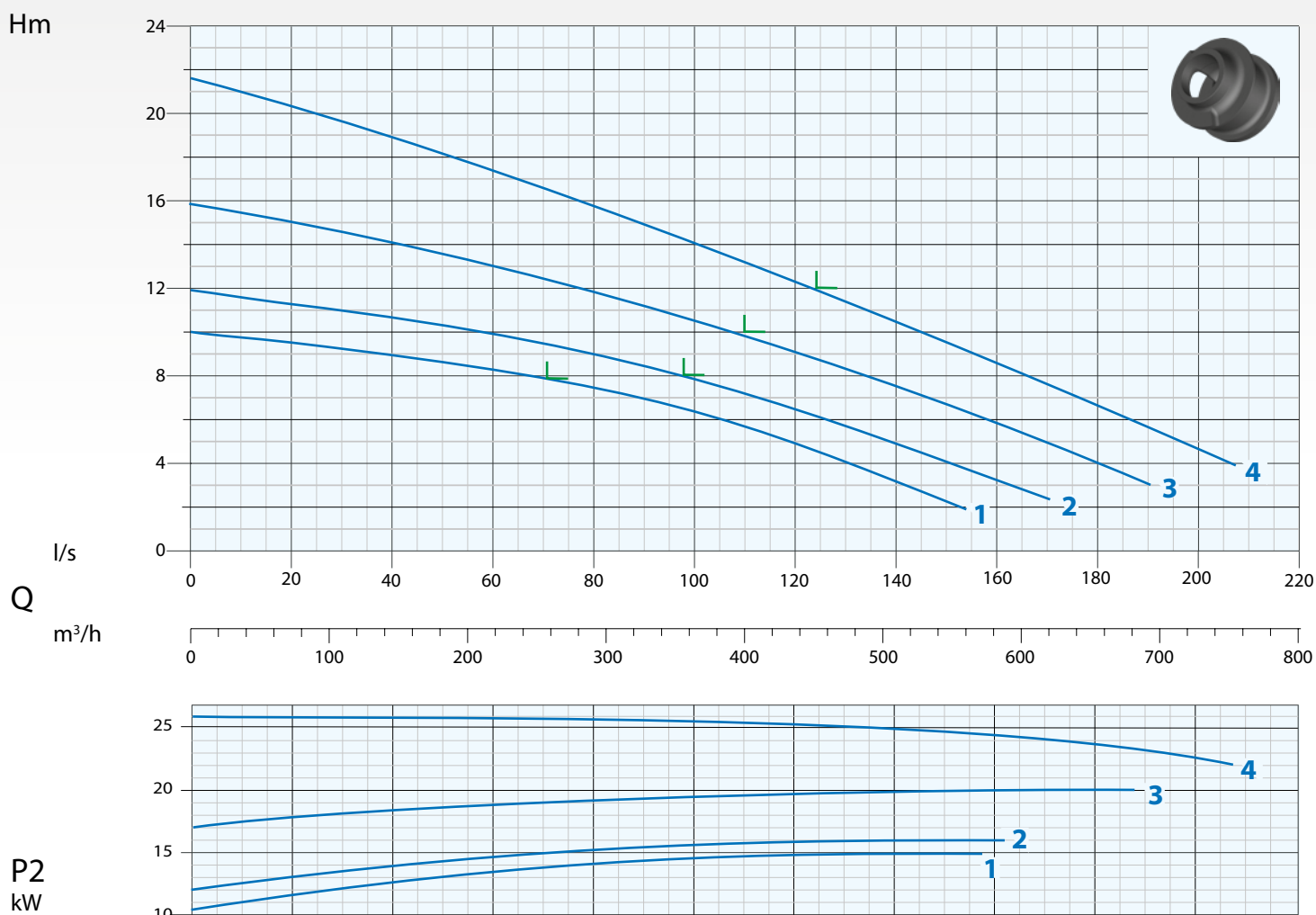
## Mandata Orizzontale DN200 PN10 - RPM 1450 1/min 4 poli

Horizontal Outlet DN200 PN10 - RPM 1450 1/min 4 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



### Curva di Prestazione Performance Curve



N°	Tipo Type	l/s l/m m³/h	20	40	60	80	100	120	140	160	180	200
			1200	2400	3600	4800	6000	7200	8400	9600	10800	12000
1	AT 200/4/200 C.265	mt	9,5	9	8,5	7,5	6,5	5	3			
2	AT 200/4/240 C.270		11,5	10,5	10	9	8	6,5	5	2,5		
3	AT 200/4/240 C.275		15	14	13	11,5	10,5	9	7,5	5	4	
4	AT 200/4/240 C.280		20	18,5	17	15,5	14	12	10,5	9	7	5

N°	Tipo Type	EX	Mandata Delivery	Passaggio Free Passage	kW			R.P.M. 1/min	A 3 Phase - 400V	Hz
					P1	P2	HP			
1	AT 200/4/200 C.265	•	DN200 PN10	110 mm	18	15	20,4	1450	31,8	50
2	AT 200/4/240 C.270	•		110 mm	19,8	17	23,1		38,8	
3	AT 200/4/240 C.275	•		110 mm	22,6	20	27,2		41,4	
4	AT 200/4/240 C.280	•		110 mm	29,3	26	35,3		54,8	

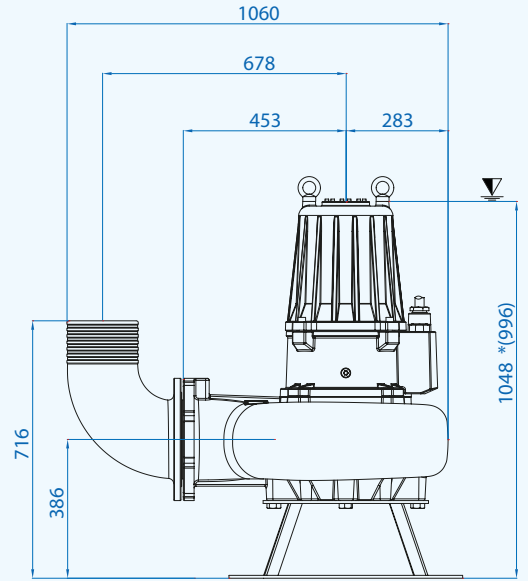
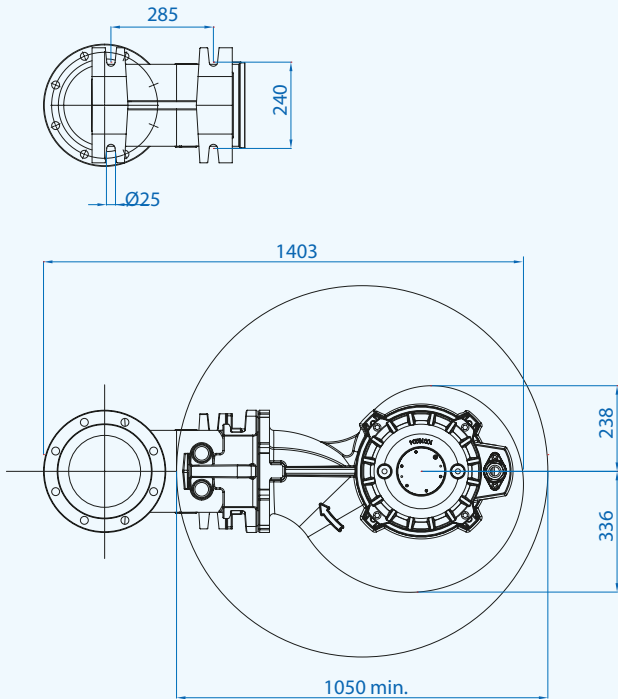
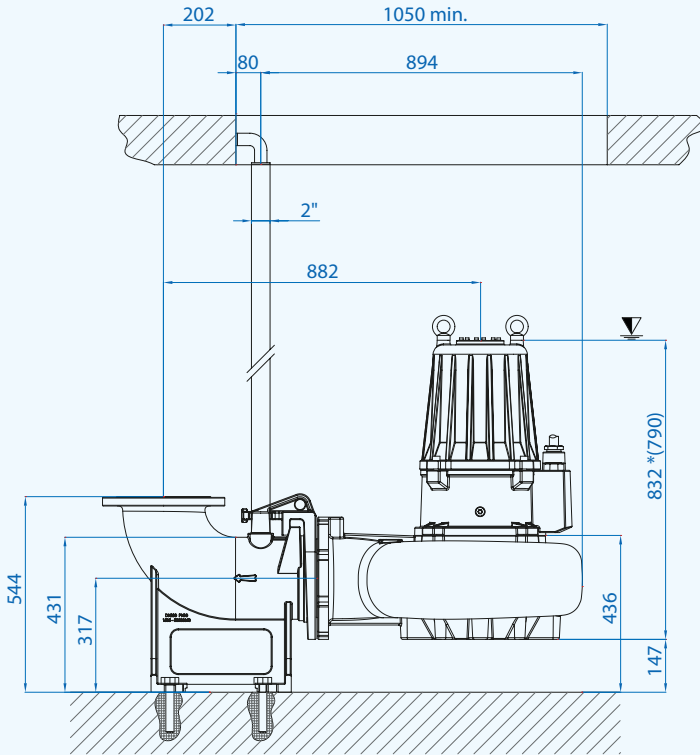
• Pompa antideflagrante disponibile con certificazioni:  
Available explosion proof pump with certifications:



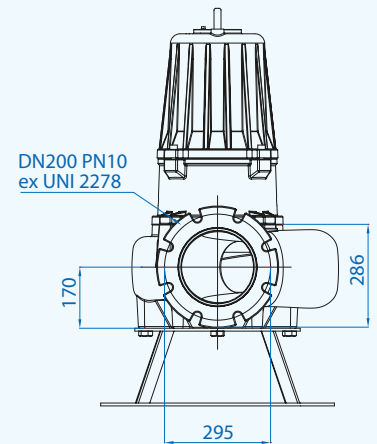
EPT 17 ATEX 2703 X



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



\*(AT 200/4/200 C.265)



Quote in mm  
Dimensions in mm

### Cavi / Cables

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

\* Terminali liberi - Free terminals

### Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 200/4/200 C.265				296
AT 200/4/240 C.270	980	1310	730	340
AT 200/4/240 C.275				341
AT 200/4/240 C.280				343



### Accessori - Optional



Piede di accoppiamento rapido Tipo: B9  
Automatic coupling foot  
Type: B9



Curva flangiata portagomma N6  
Base di sostegno P9  
Flanged hose connection N6  
Foot support P9

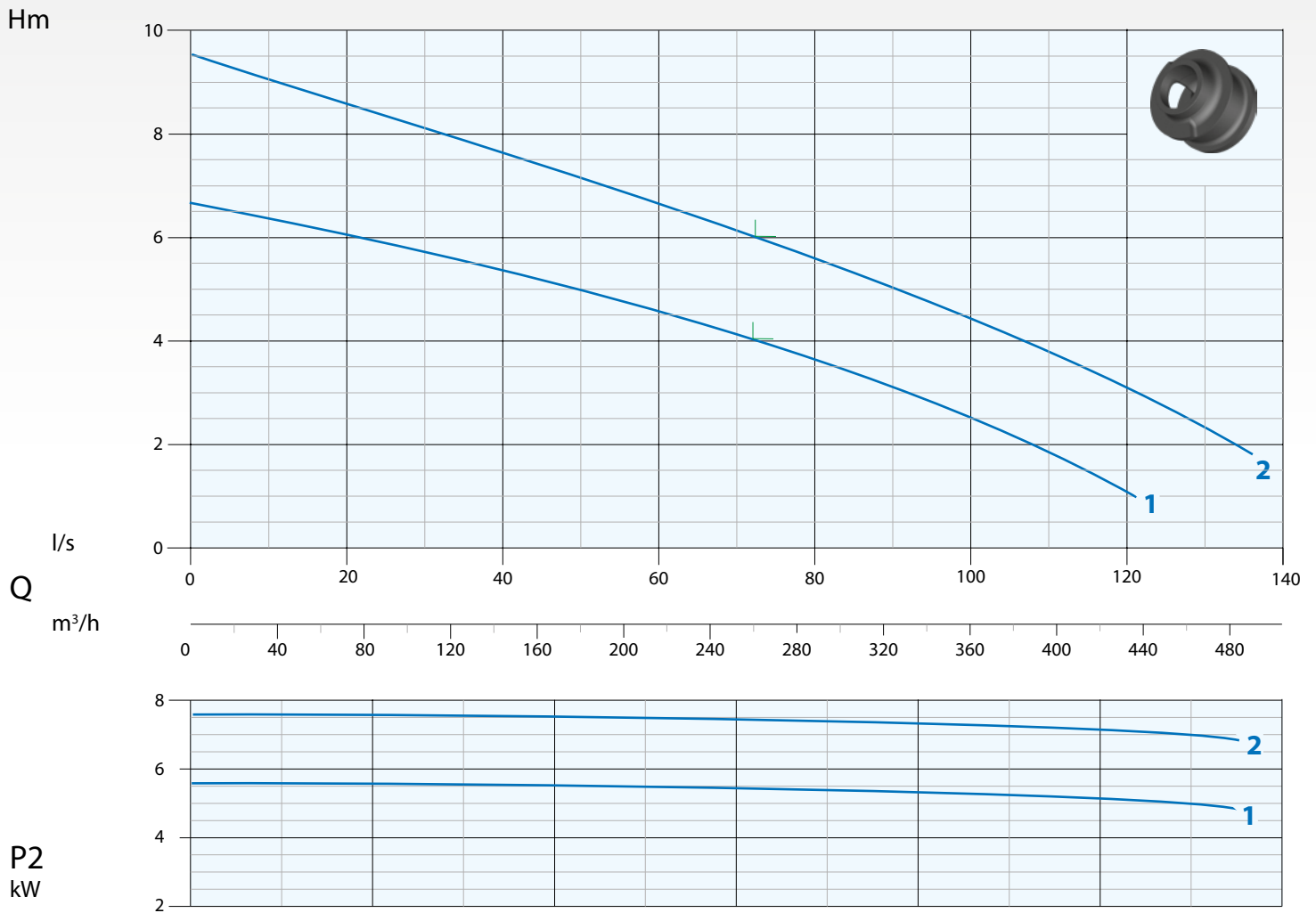
## Mandata Orizzontale DN200 PN10 - RPM 960 1/min 6 poli

Horizontal Outlet DN200 PN10 - RPM 960 1/min 6 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



### Curva di Prestazione Performance Curve



N°	Tipo Type	l/s	10	20	30	40	50	60	80	100	120	130
			l/m	600	1200	1800	2400	3000	3600	4800	6000	7200
		m³/h	36	72	108	144	144	216	288	360	432	468
1	AT 200/6/240 C.275	mt	6,5	6	5,7	5,4	5	4,5	3,6	2,5	1,5	
2	AT 200/6/240 C.280		9	8,5	8	7,6	7,2	6,6	5,5	4,5	3	2,3

N°	Tipo Type	Mandata Delivery	EX	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A		Hz
					P1	P2			3 Phase - 400V		
1	AT 200/6/240 C.275	DN200 PN10	•	110 mm	6,6	5,5	7,5	960	14,2		50
2	AT 200/6/240 C.280		•	110 mm	9	7,5	10		17,5		

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

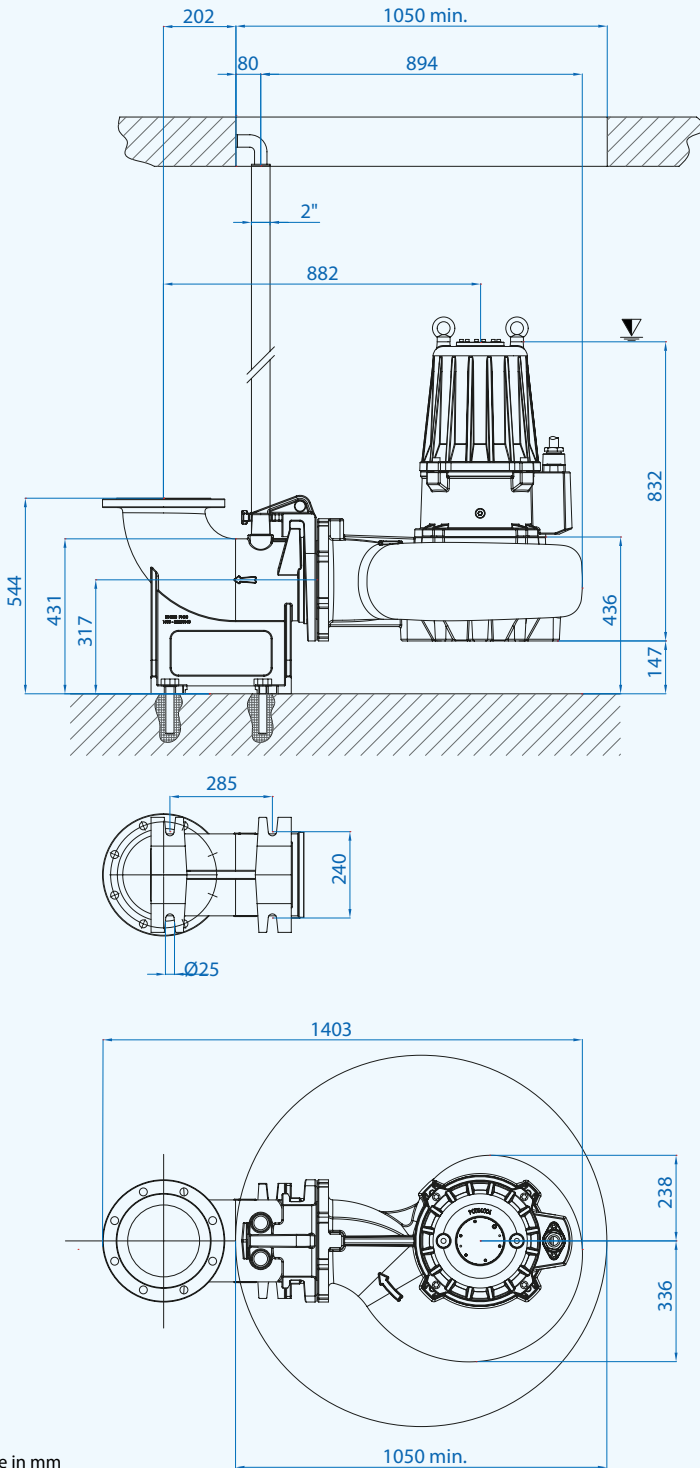


EPT 17 ATEX 2703 X

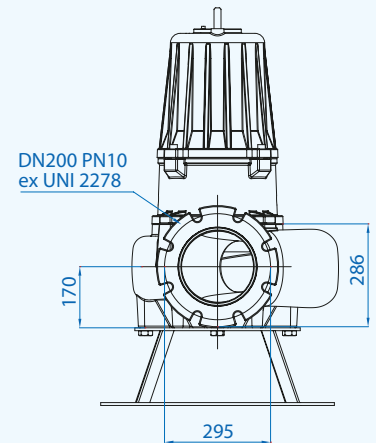
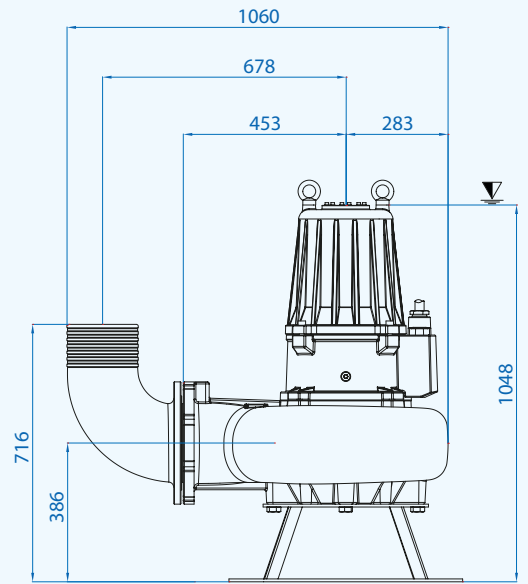


Ex db IIB T4 Gb  
Ex h IIB T4 Gb  
0° ≤ Ta ≤ 40°

# A6



Quote in mm  
Dimensions in mm



### Cavi / Cables

Pompe Pumps	Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm <sup>2</sup> Cable cross section mm <sup>2</sup>	mt
200/6/240	Standard	3 ~ 400V	H07RN8F	10x2,5 Ø23*	10
	ATEX	Y-Δ	NSSHÖU-J	7x2,5+3x0,50 Ø20*	10

\* Terminali liberi - Free terminals

### Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
AT 200/6/240 C.275	980	1310	730	320
AT 200/6/240 C.280				322



### Accessori - Optional



Piede di accoppiamento rapido Tipo: B9  
Automatic coupling foot  
Type: B9



Curva flangiata portagomma N6  
Base di sostegno P9  
Flanged hose connection N6  
Foot support P9