Technical data

Pump name 3D 65-160/15

Customer	Date 23-June-2020	Company
Contact	Item no.	Issued by
Phone	Project	Phone
E-mail	Project ID	E-mail

Requested data

1	Pump type	CENTRIFUGAL PUMP	Fluid		Water, clean
2	Number of pumps / Reserve	1 / 0	Liquid temperature	K	293
3	Flow m³/h	0	Kin. viscosity	mm²/s	1
4	Head m	0	Vapour pressure	kPa	2.2
5	Geodetic head m	0	PH value		7
6	Inlet pressure (pin) kPa	10	Density	kg/m³	1000
7	Available system NPSH	0	Solids	Weight %	0
8	Ambient temperature K	290			

Pump

9	Pump name	3D 65-160/15	Frequency		Hz	50
10	Design	CENTRIFUGAL PUMP	Installation type			STANDARD
11	Manufacturer	EPE	Impeller Diameter	Max.	mm	178
12	Speed 1/min	2900		Designed	mm	178
13	No. of Stage	1		Min.	mm	178
14	Connection Suction side	EN 1092-2	Flow	Operating	m³/h	
15	Connection Discharge side	EN 1092-2		Max-	m³/h	138
16	Max Working Pressure kPa	1000		Min-	m³/h	42
17	Shut-off head kPa	470.10	Head	Operating	m	
18	Total weight kg	See the table of "Dimensions".		- (Qmax.)	m	29.0
19	Shaft power kW			- (Qmin.)	m	46.0
20			Max. Shaft Power at max. impeller		kW	14.20
21	Required pump NPSH m		Efficiency		%	

Materials

22	Impeller	AISI 316		
23	Casing	Cast iron		
24	Shaft	AISI 304 (wet extension)		
25				
26				
27				

Motor

28	Manufacturer	EPE Standard	Insulation class		F
29	Type	TEFC_3D 65-160/15_400_Three Phase	Phases		3~
30	Specific design	IE3 / 50 Hz / Pole pairs 1	Frame size		
31	Rated power kW	15	Weight	kg	0
32	Number of poles	2	Electric voltage	V	400
33	Speed 1/min	2900	Electric current	A	27.7
34	Degree of protection	IP 55			
35					

Remarks

EBARA

Performance curve

Pump name 3D 65-160/15

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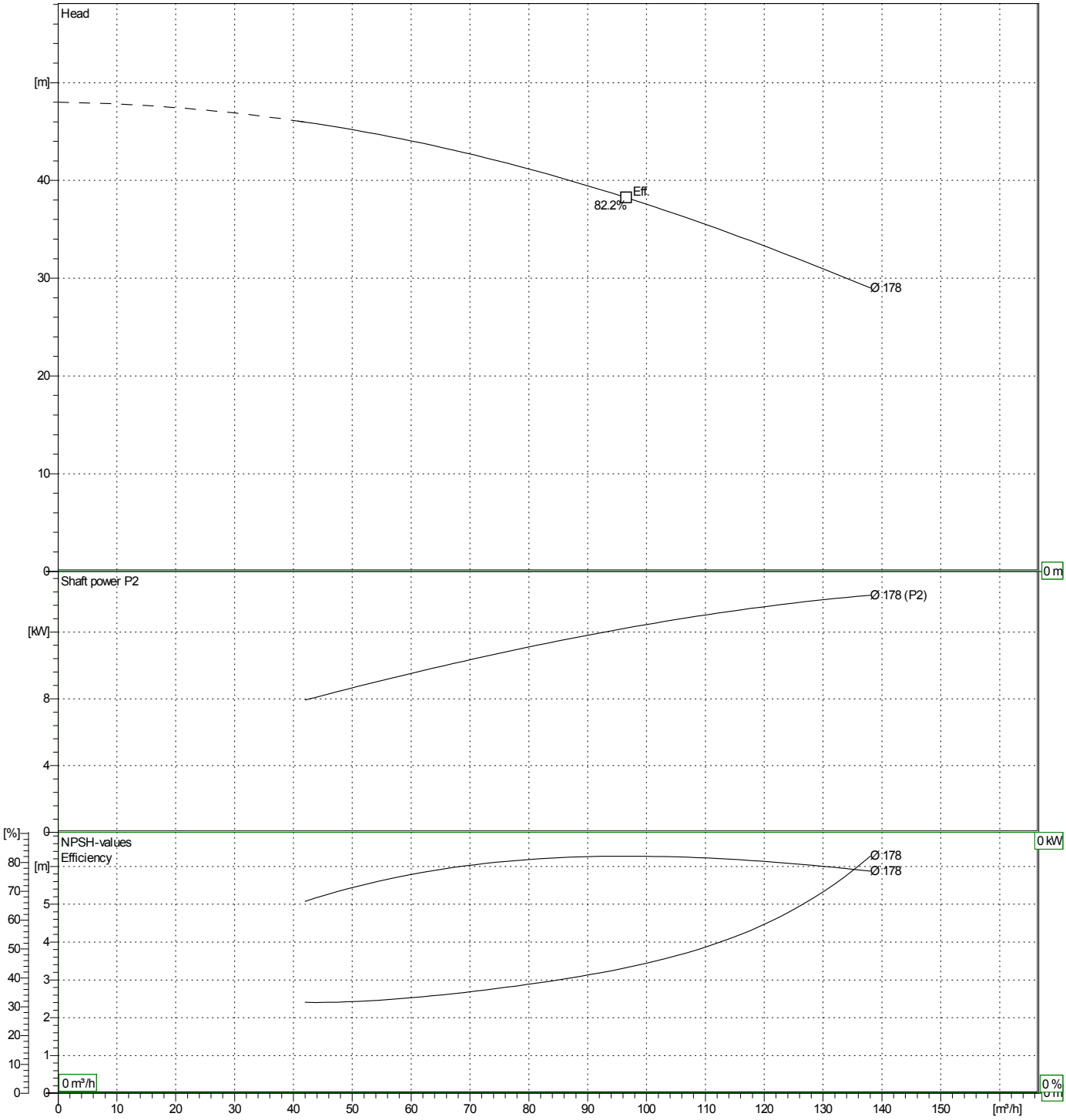
1	Flow	m³/h	0
2	Head	m	0
3	Geodetic head	m	0

Pump

Operating Flow	m³/h		Frequency	Hz	50
Operating Head	m		Number of poles		2
Impeller Diameter	Designed mm	178	Speed	1/min	

Test standard: ISO 9906:2012 - Grade3B

Water, clean [100%] ; 293K; 998.3kg/m³; 1mm²/s

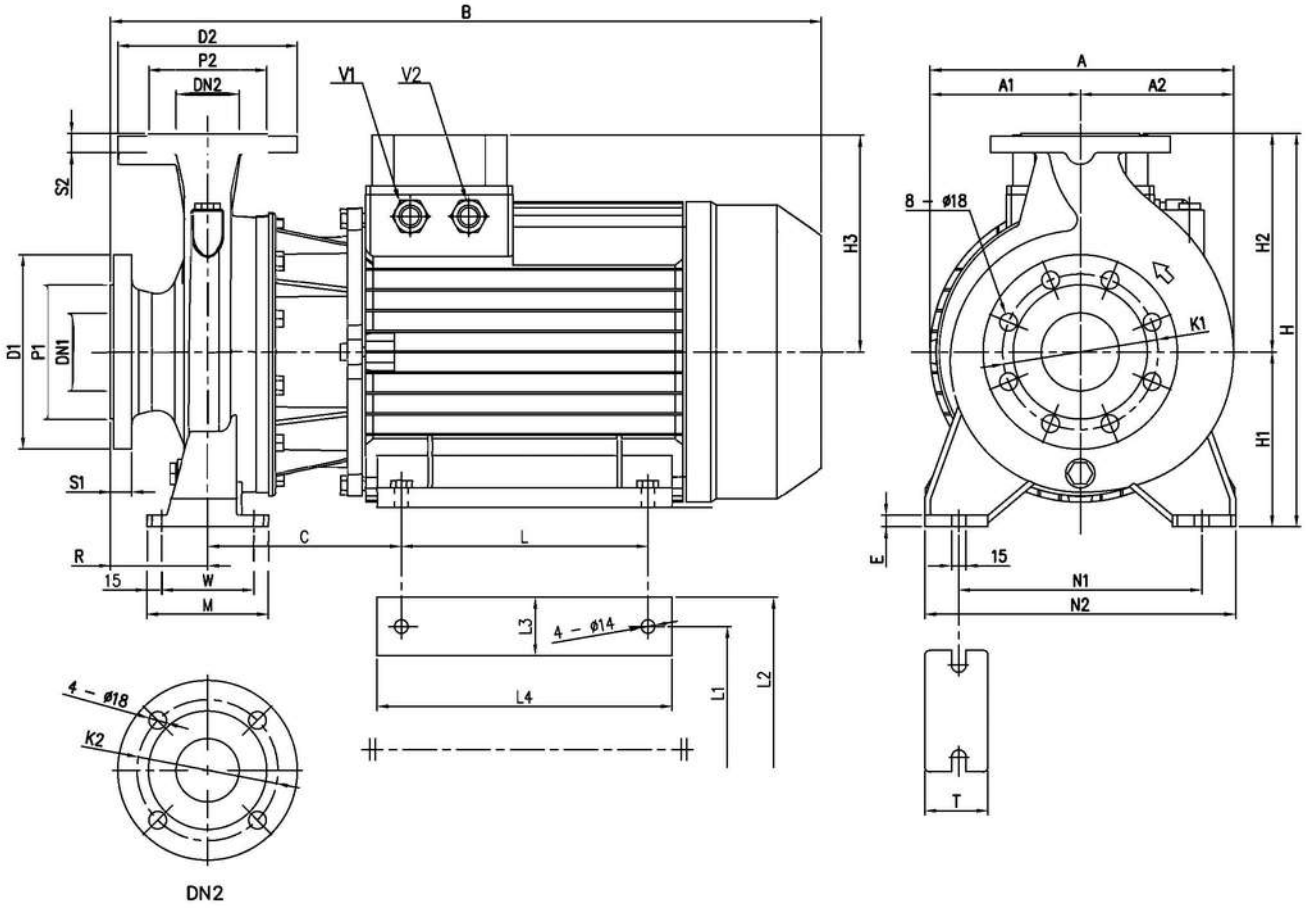


EBARA

Dimensions

Pump name 3D 65-160/15

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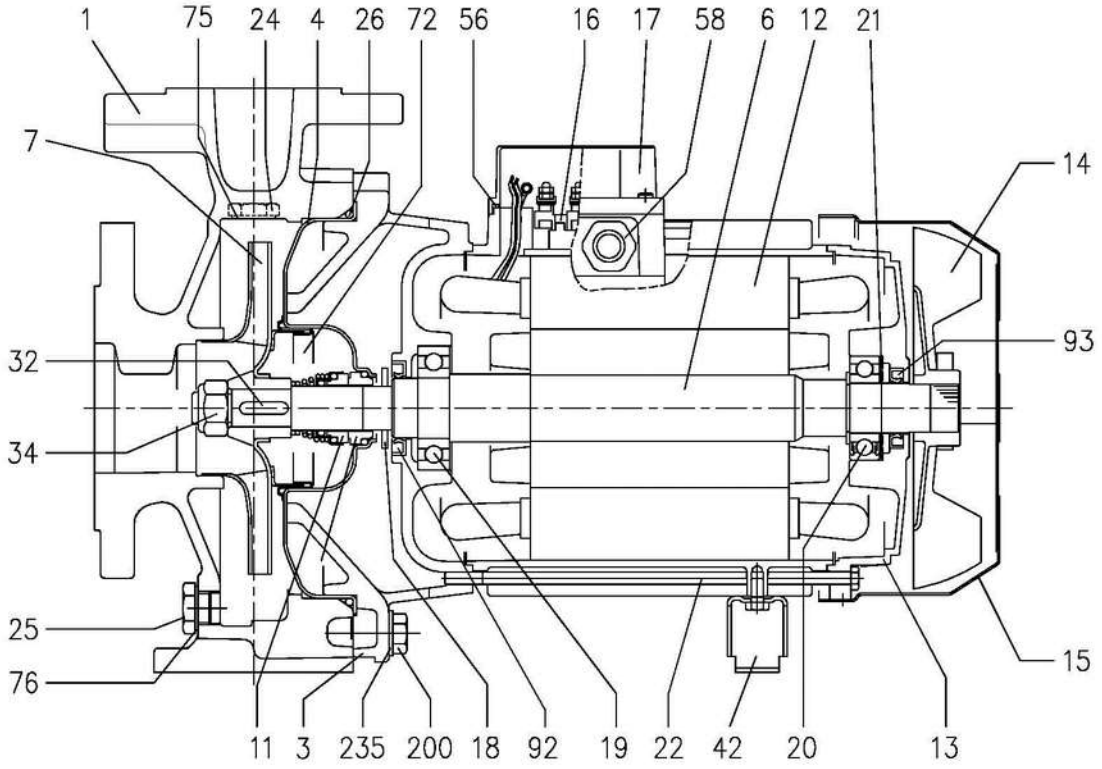
Dimensions in mm								
1	A	296	E	12	R	100		
2	A1	154.5	H	360	S1	22		
3	A2	141.5	H1	160	S2	20		
4	B	732	H2	200	T	65		
5	C	199.5	H3	223	V1	PG 21		
6	Dia D1	200	L	254	V2	PG 21		
7	Dia D2	185	L1	254	W	95		
8	Dia DN1	80	L2	318	Weight P&M	129.1 kg		
9	Dia DN2	65	L3	64				
10	Dia K1	160	L4	304				
11	Dia K2	145	M	125				
12	Dia P1	138	N1	212				
13	Dia P2	122	N2	280				

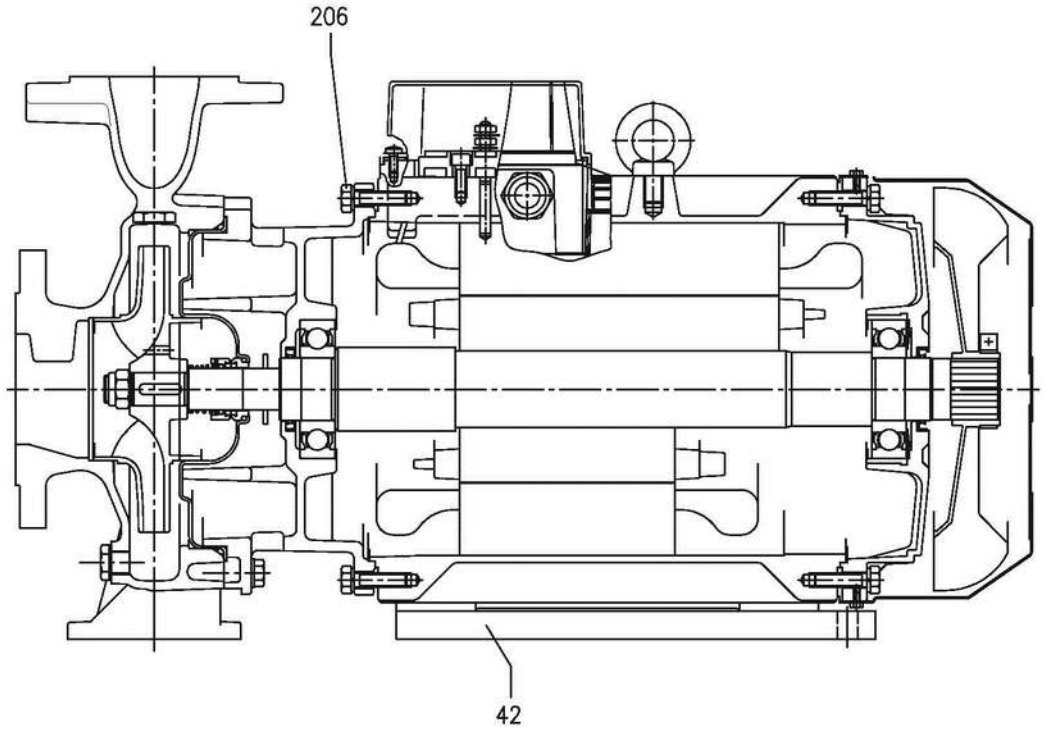
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Construction

Pump name 3D 65-160/15

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Construction

Pump name 3D 65-160/15

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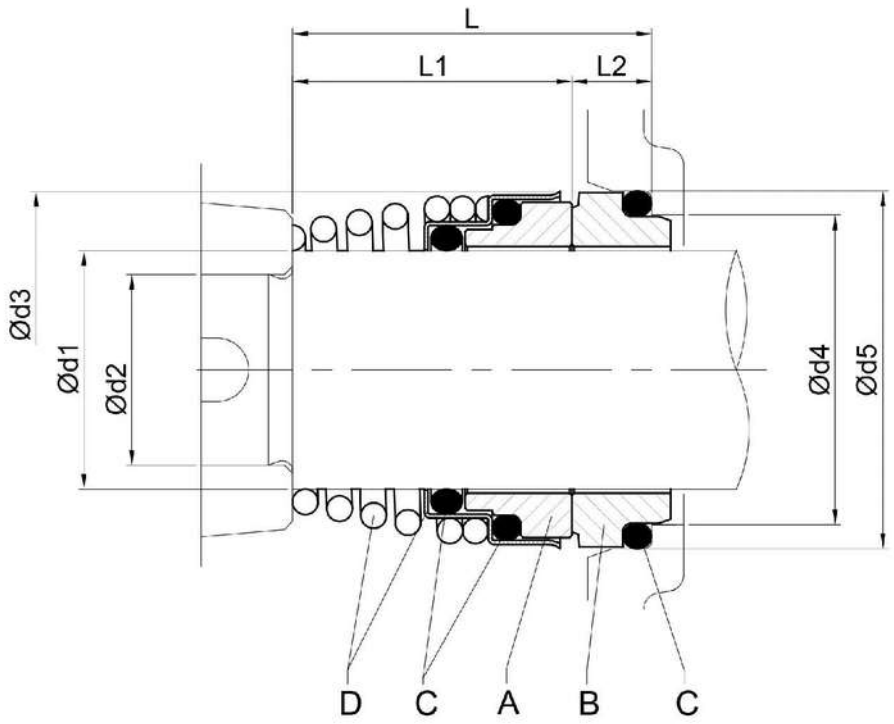
N°	PART NAME		MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing		Cast iron EN-GJL-250-EN 1561			1
3	Motor bracket	[1]	-			1
4	Casing cover		EN 1.4301 (AISI 304)			1
6	Shaft with rotor - Wet extension		EN 1.4301 (AISI 304)			1
7	Impeller	[2]	-			1
11	Mechanical seal	[3]	-			1
12	Motor frame with stator		-			1
13	Motor cover		Aluminium			1
14	Fan		PA			1
15	Fan cover		Fe P04 Galvanized			1
16	Terminal		-			1
17	Terminal box cover		Aluminium (three phase version)			1
18	Splash ring 15 kW and above		NBR	50x29.5x3	EBARA DRAWING	1
19	Bearing		-			1
20	Bearing		-			1
21	Adjusting ring		Steel C70			1
22	Screw 15 kW and above		Gv. Steel 8.8 strenght class ISO 898-1	M10x40	UNI 5739	4
24	Priming plug		Brass	G 3/8" L=8		1
25	Draing plug		Brass	G 3/8" L=8		1
26	O-ring	50-200/15, 65-160/15, 65-200/15, 65-200/18.5, 65-200/22 [4]	NBR/FPM/EPDM	227.96x5.34	OR 6895	1
32	Key	50-200/15	EN 1.4401 (AISI 316)	A 6x6x25	UNI 6604	1
		15 kW and above		A 8x7x30		
34	Impeller nut	50-200/15	EN 1.4301 (AISI 304)	M18x1.5	UNI 7474	1
		15 kW and above		M20x1.5		
42	Foot		Aluminium / Galvanized steel		EBARA DRAWING	[5]
56	Box gasket		NBR			1
58	Cable gland		-			2
72	Casing ring		EN 1.4301 (AISI 304)			1
75	Washer		Aluminum	22x17x1.5	EBARA DRAWING	1
76	Washer		Aluminum			1
92	Lip seal	From 15 kW to 22 kW	-	45x60x7	DIN 3760 without spring	1
93	Lip seal	From 15 kW to 22 kW	-	45x60x7	DIN 3760 without spring	1
200	Screw	50-200/15, 65-160/15, 65-200/15, 65-200/18.5, 65-200/22	Gv. Steel 8.8 strenght class ISO 898-1	M 10x35	UNI 5739	12
206	Screw for bracket	[6]	Gv. Steel 8.8 strenght class ISO 898-1	M 10x40	UNI 5739	4
235	Washer	50-200/15, 65-160/15, 65-200/15, 65-200/18.5, 65-200/22	Galvanized Steel	10.5x21	UNI 6592	12

[1] Cast iron EN-GJL-200-EN 1561 for models with 15, 18.5, 22 kW motor
Aluminum AL-EN-1706-AC-46000-D for all the others
[2] EN 1.4301 (AISI 304) for 50 series
EN 1.4401 (AISI 316) for 65 series
[3] See **CONSTRUCTION 3**
[4] See **CONSTRUCTION 3**, "O-ring" column
[5] 0 for 65-160/15 kW
2 for 65-200/15, 18.5, 22 kW
[6] Only for pumps with 15 kW motor and above

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Construction

Pump name 3D 65-160/15

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Pump type	Dimensions [mm]								Material Standard			
	d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring
65-160/15 65-200	30	24	46	39	45	42.5	32.5	10	Ceramic	Carbon	NBR	EN 1.4401 (AISI 316)