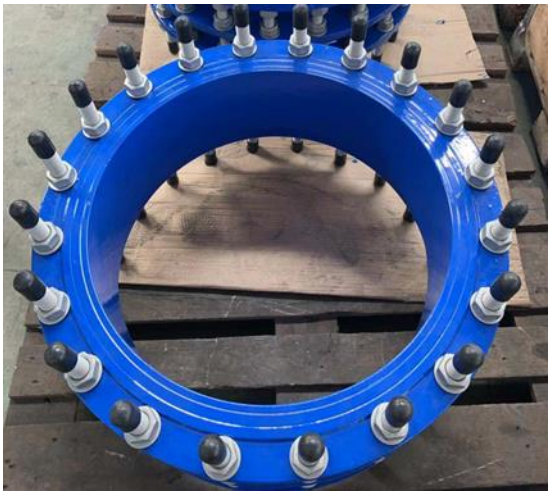
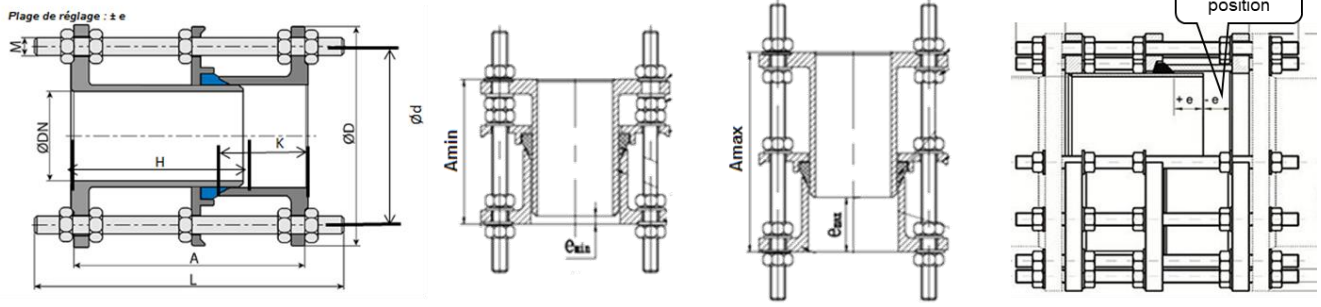
1. Main Features

1) EN1563: European standard for spheroidal graphite cast iron
2) EN545:2000: Ductile iron pipes, fittings, accessories and their joints for water pipelines – Requirements and test methods
3) EN14901: Ductile iron pipes, fittings and accessories Epoxy coating (heavy duty) of ductile iron fittings and accessories
4) EN681-1: Elastomeric Seals-Material requirements for pipe joint seals used in water and drainage application-Part 1vulcanized rubber
5) EN 1092-2: Flanges and their Joints-Circular flanges for pipe valves, fittings and accessories, PN designated-Part 2. cast iron flanges
6) This specification applies to dismantling joint with PAM logo in the size range DN50 to DN600



2. Product Information

The self-restrained dismantling joint allows the installation or removal of equipment between two fixed flanges of a pipeline. The removable flange can reach “+-e” displacement in an axial direction to ease the removal of the equipment.



Functional dimensions PN10

DN	PN10	Height H mm	Height K mm	bolts			working tolerances			
				Number	*øM*	L	*Amax*	*Amin*	*middle A*	*±e*
50	PN10/16	155	80	4	16	340	219	160	**190**	30
60/65	PN10/16	155	80	4	16	340	219	160	**190**	30
80	PN10/16	155	80	8	16	340	219	160	**190**	30
100	PN10/16	155	80	8	16	340	219	164	**192**	28
125	PN10/16	160	80	8	16	340	224	170	**197**	27
150	PN10/16	165	80	8	20	360	229	178	**204**	26
200	PN10	160	80	8	20	360	224	184	**204**	20
250	PN10	160	80	12	20	360	220	185	**203**	18
300	PN10	180	90	12	20	410	250	196	**223**	27
350	PN10	180	90	16	20	410	246	197	**222**	25
400	PN10	180	90	16	24	450	246	205	**226**	21
500	PN10	180	90	20	24	450	246	214	**230**	16
600	PN10	200	90	20	27	490	272	224	**248**	24

Functional dimensions PN16

DN	PN16	Height H mm	Height K mm	bolts			working tolerances			
				Number	*øM*	L	*Amax*	*Amin*	*middle A*	*±e*
50	PN10/16	155	80	4	16	340	219	160	**190**	30
60/65	PN10/16	155	80	4	16	340	219	160	**190**	30
80	PN10/16	155	80	8	16	340	219	160	**190**	30
100	PN10/16	155	80	8	16	340	219	164	**192**	28
125	PN10/16	160	80	8	16	340	224	170	**197**	27
150	PN10/16	165	80	8	20	360	229	178	**204**	26
200	PN16	160	80	12	20	360	224	184	**204**	20
250	PN16	160	80	12	24	370	220	190	**205**	15
300	PN16	180	90	12	24	420	250	205	**228**	23
350	PN16	180	90	16	24	420	246	205	**226**	21
400	PN16	180	90	16	27	450	246	215	**231**	16
500	PN16	190	90	20	30	470	256	229	**243**	14
600	PN16	200	90	20	33	500	272	239	**256**	17

Note:

- Amax: the length of upper limit position of the removable body inside the fixed body.
- Amin: the length of lower limit position of the removable body inside the fixed body.
- Middle A: face to face dimension of two flanges at medium position of 2 limits opposite positions Amax and Amin, must be sure of the parameter as the dispatch situation.
- L: bolt length

"

3. Material Property

Item	Types of Materials
Fixed flange	ENGJS 500-7 EN 1563
Removable flange	ENGJS 500-7 EN 1563
Gland	ENGJS 500-7 EN 1563
Gasket	EPDM 70+-5 with WRAS certificate
Bolt& Nut	8.8 grade carbon steel with Geomet 720 + plus L or VLH
Bolt cover	EPDM Rubber
Coating Power	RAL5005 epoxy powder with WRAS Optional: Akzo HJF13R or Jinmao 5005 优 B

4.1 Mechanical property

Tensile Strength	Elongation	Hardness HB
≥500Mpa	≥7%	170-230

4.2 Microstructure

Nodularity	cementite
≥80%	≤5%

4. Market Label

The following marks are casted on the fixed flange unless specifically requested by client

5. Coating Requirement

For UK order there is a unique barcode on each valve, and all codes are updated as table below.

6.1 Shot blasted pieces' control

Oxide elimination

Requirements: Sa2.5 level according to ISO 8501-1

Visual control: no agree, no oil, no oxide trace

Cleanness

Requirements: level≤ 4 at the scotch test according to EN ISO 8502-3

Minimum frequency: two pieces per shit

6.2 Epoxy powder storage

A FIFO stock management must be ensured to guarantee the use of no out of date powders

6.3 Coating operation

Delay between shot blasting and coating

The delay between shot blasting and coating shall not exceed 8 hours

If industrial constraints require it, a delay up to 24 hours can be accepted if the pieces are maintained in non-oxidizing temperature and humidity conditions

6.4 Thickness requirement

Thickness Minimum as per EN14901	
Local minimum thickness(gasket sealing surface and hole, marked with red E)	≥200um
Average thickness(marked with red F)	≥250um

The average thickness in the sealing areas marked in red E shall not be higher than 800um

6.5 Coating repair area on hanger touch point

Repair area on hook points should be less than 1cm× 1cm per point

6.6 Cross linking (MIBK test)

Requirements: no color on a white cloth after 30s of contact with a MIBK drop on the coating

Minimum frequency: one piece per shift

6.7 Impact test

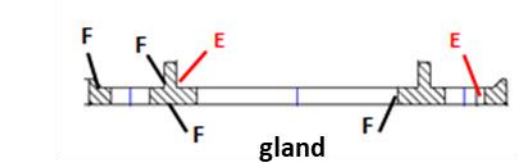
Requirements: after a 5 N.m impact, no crack

Minimum frequency: one piece per shift

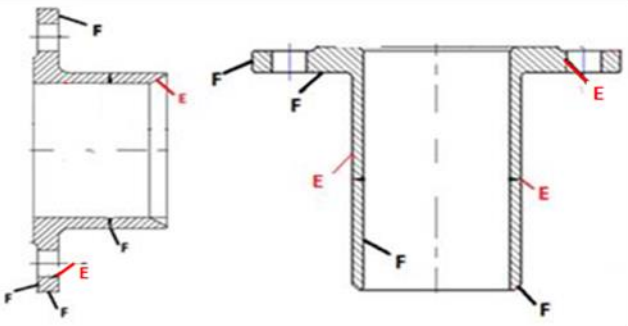
6.8 Adherence (pull-off test)

8MPa average mini and 6MPa mini according to the EN ISO 4624 standard

Minimum frequency: once every three months



gland



Fixed flange

Removable flange