

USER MANUAL

1. REGISTRATION | 2. LOGIN | PRE-SETTING CAD FORMATS | 4. HOW DO I FIND THE RIGHT COUPLING? | 5. CONNECTION DIMENSIONS | 6. OFFER DRAWING | 7. GENERATING AND DOWNLOADING A CAD MODEL | 8. LOGOUT

VULKANEP
ENGINEERING PORTAL



Registering for the **VULKAN Engineering Portal** allows you to edit coupling hubs to the required connection dimensions and then download the coupling as a CAD model.

1. REGISTRATION

- 1.a Select the desired **language**.
- 1.b Select **Create access**.
- 1.c **Access data:** Enter a username and password. Your password must be at least 6 characters long (max. 60) and contain at least one lower case, one upper case and one number. For the e-mail address, please give your business e-mail address. Private e-mail addresses are sometimes prohibited from downloading.
- 1.d **Personal details:** Please use your company contact details. Please use the same number for telephone and fax.

The image displays two screenshots of the Vulkan Engineering Portal registration process. The top screenshot shows the 'Supplier Catalog Browsing' page with callouts 1.a and 1.b. The bottom screenshot shows the 'Create Free Account' page with callouts 1.c and 1.d.

1.a Select the desired language. The screenshot shows the 'Language' dropdown menu in the top right corner of the page.

1.b Select Create access. The screenshot shows the 'Create access' button in the top right corner of the page.

1.c Account Data. The screenshot shows the 'Create Free Account' page with the following fields filled out:

- User name: John Doe
- Password: [Redacted]
- Confirm Password: [Redacted]
- Email: john.doe@vulkan.com

1.d Personal Information. The screenshot shows the 'Personal Information' section with the following fields filled out:

- Title: Mr.
- First name: John
- Last name: Doe
- Company: VULKAN Kupplungs- und Getriebebau Bernhard Ha
- Country: Germany
- Street: Heerstraße 66
- ZIP: 44653
- City: Herne
- State: NRW
- Phone: +49 (0) 2325 922-0
- FAX: +49 (0) 2325 922-0

Once you have registered, you will receive an e-mail with an activation link for the **VULKAN Engineering Portal**.

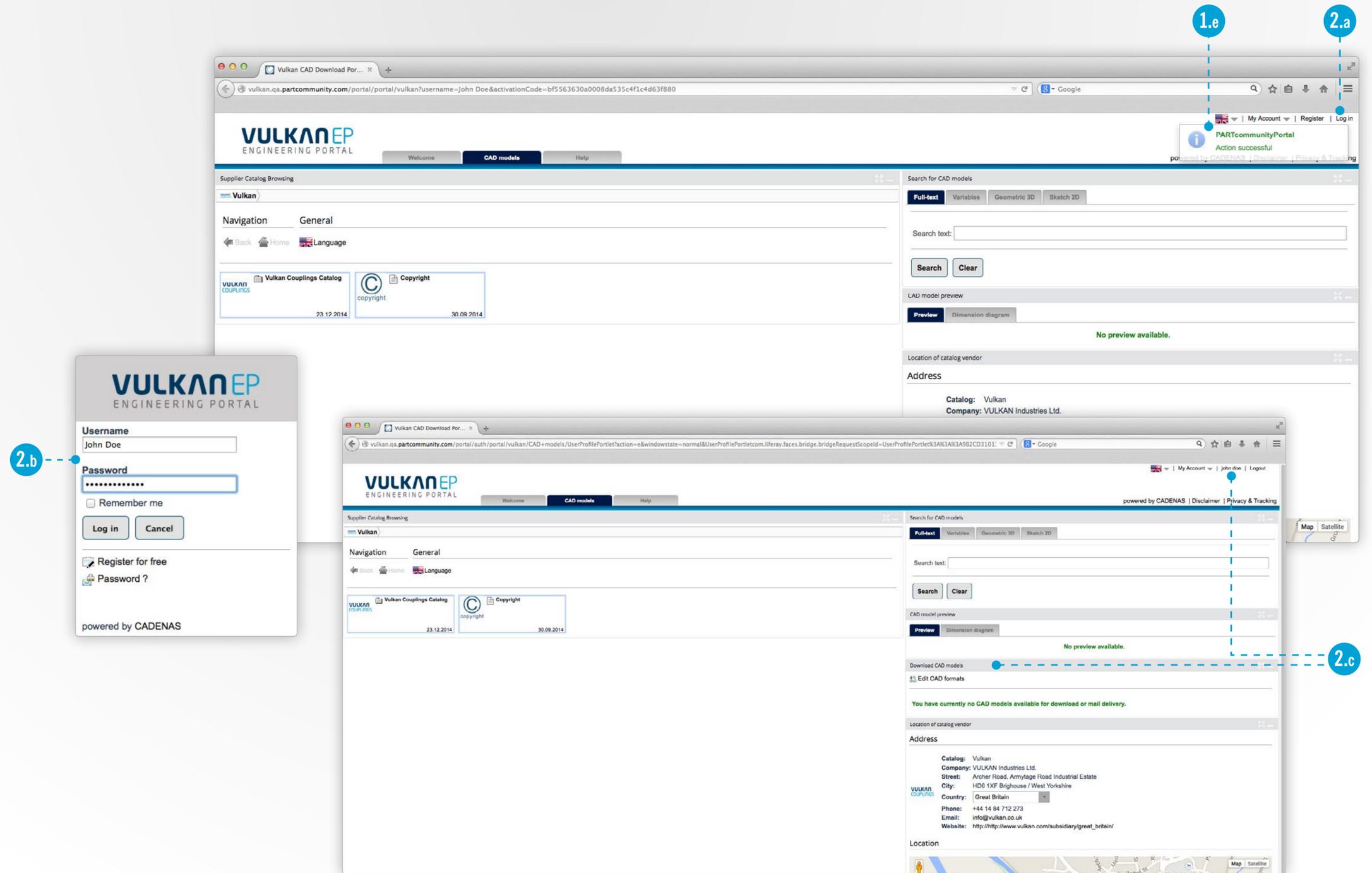
ACTIVATION

Click on the link in the e-mail. By doing so, you confirm that access for the e-mail address specified should be enabled.

- 1.e You will receive a message confirming **Action successful**, which completes your registration.

2. LOGIN

- 2.a Select **Login**.
- 2.b Enter your **Username** and **Password**.
- 2.c Once successfully logged in, your username will appear in the top menu and the menu item **Download CAD** models will be added.



3. PRE-SETTING CAD FORMATS

3.a Click on **Select CAD formats**.

3.b Click on **Add CAD formats**.

A settings dialogue will open for:

3.c **Type of generation**

Select an option for how and in what formats the CAD file should be provided for you. The **Formats** may vary depending on the **Type of generation**.

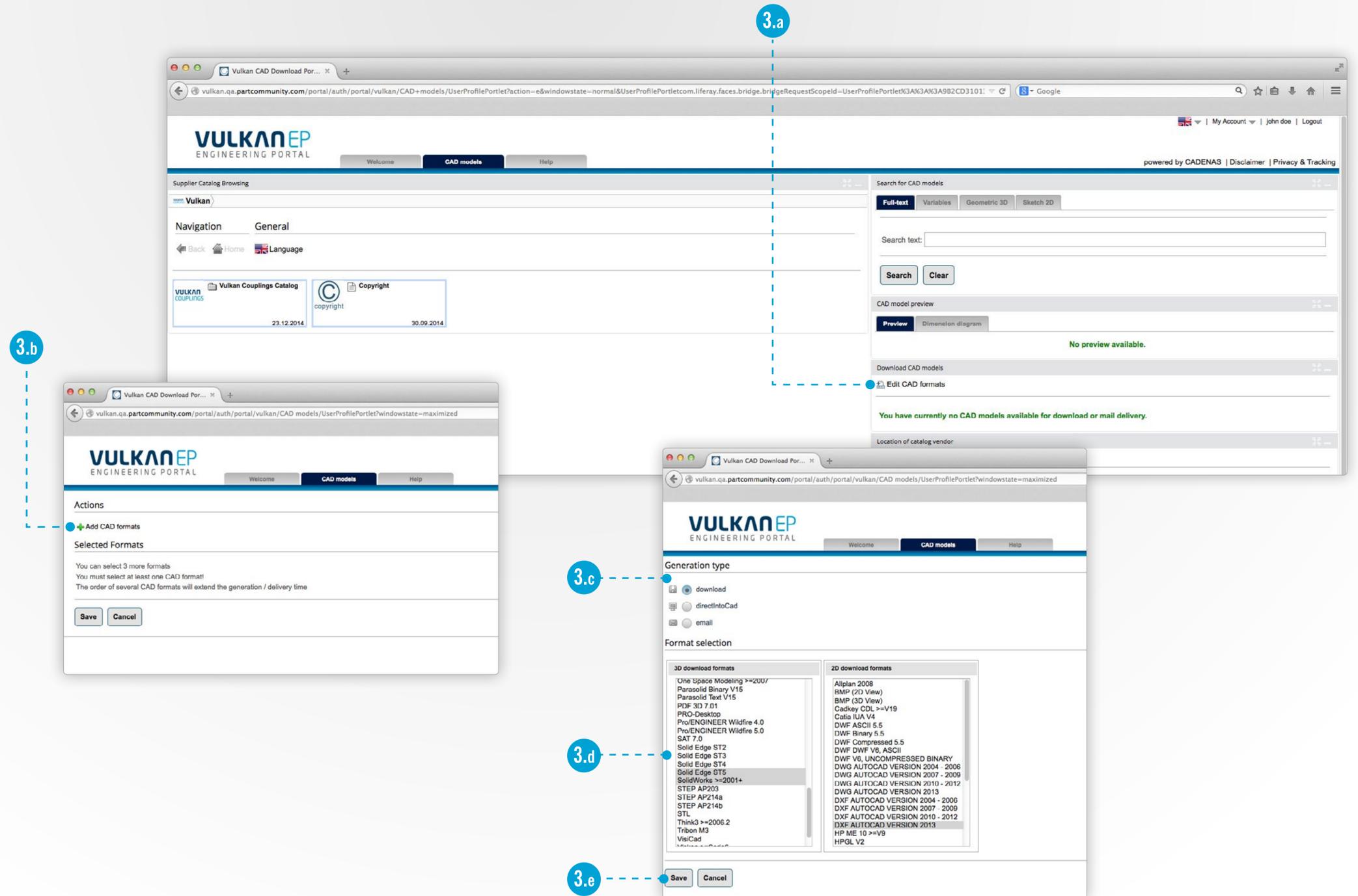
3.d **Select format**

Select at least 1 format (max. 10 for all generations types together). You can select multiple formats using the CTRL key.

3.e **Save** your selection.

You can view and change your saved settings any time by clicking on

Select CAD formats **3.a** again.



4. HOW DO I FIND THE RIGHT COUPLING?

Selection using system parameters

If you know the unit torque TN, you can also select a coupling via the variable TKN, the nominal torque of the coupling.

- 4.d Select the **Variables** tab.
- 4.e The variables are sorted alphabetically; scroll through the list until you find the page with the required variable.
- 4.f Enter the appropriate value for the variable in the **Value** search box, then click **Search**.
- 4.g You can now select the right coupling from the search results via the series and torque range required.

The screenshot shows the 'Search for CAD models' interface. The 'Variables' tab is selected. A search for 'TKN' with a value of '420' is performed. The results show two hits for couplings with a nominal torque of 420 kNm.

Name	Description	Comparator	Value
PSI	Relative Damping	=	
T	Pitch for connecting bolts	=	
TKMAX1	Max. Torque 1	=	kNm
TKMAX2	Max. Torque 2	=	kNm
TKN	Normal Torque	=	420
TKW	Perm. Vibratory Torque	=	kNm
TMAX	Max. Torque Range	=	kNm
TN	Equipment Torque	=	kNm
TYP	Hardness	=	

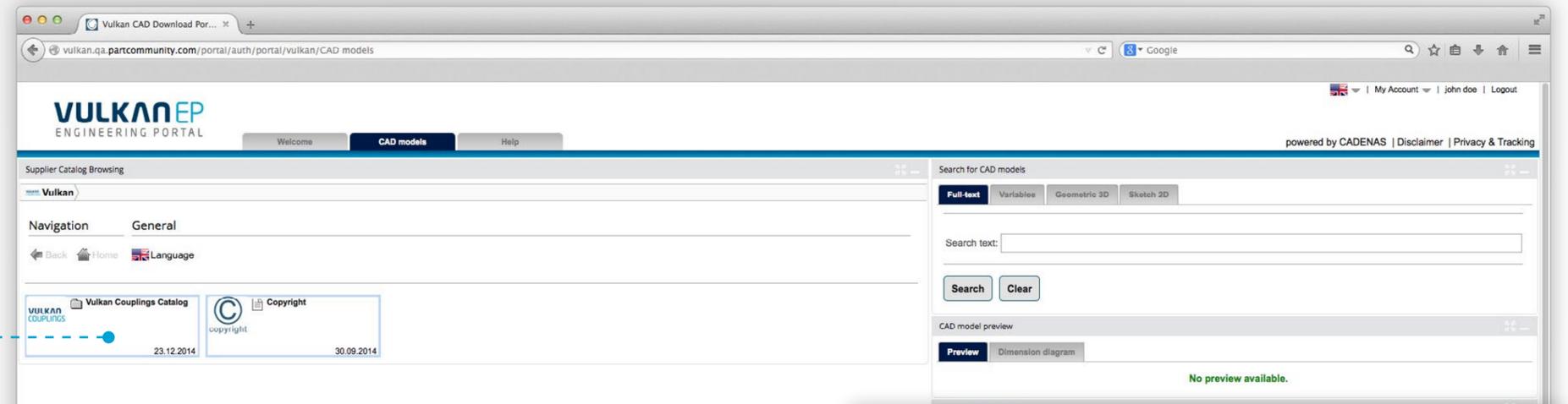
Search results for 'TKN = 420':

- 2 hits
- 2100 Short Length - Tkn 400 kNm - 420 kNm 1-row Vulkan
- 2200 Standard Length - Tkn 400 kNm - 420 kNm 1-row Vulkan

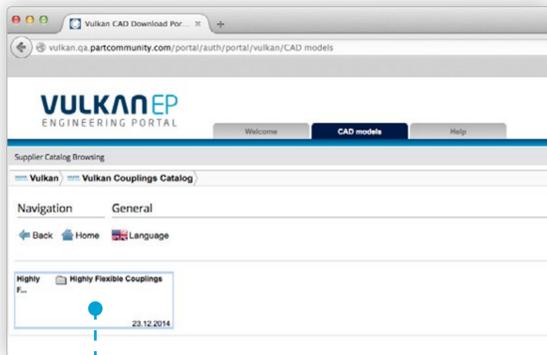
4. HOW DO I FIND THE RIGHT COUPLING?

Selecting the product

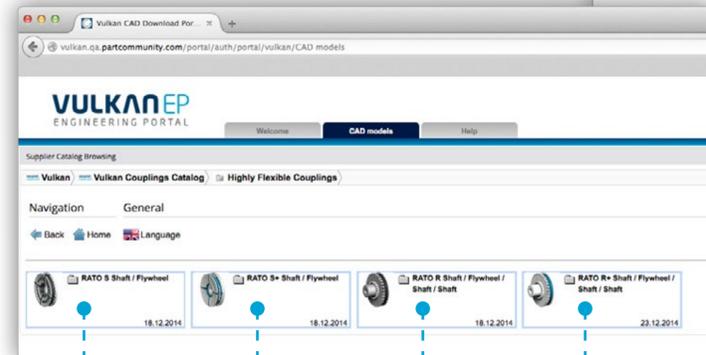
- 4.h Select **VULKAN** couplings catalogue.
- 4.i Click on **Highly flexible couplings**.
- 4.j Search for an appropriate **Coupling type**.
- 4.k Select the **Series** and the **Design** of the coupling type.
- 4.l Now select the **Size** of the coupling based on the required **Torque** and the **Rubber hardness**.



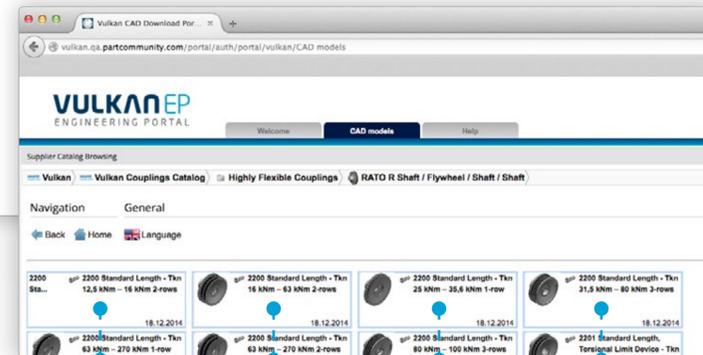
4.h



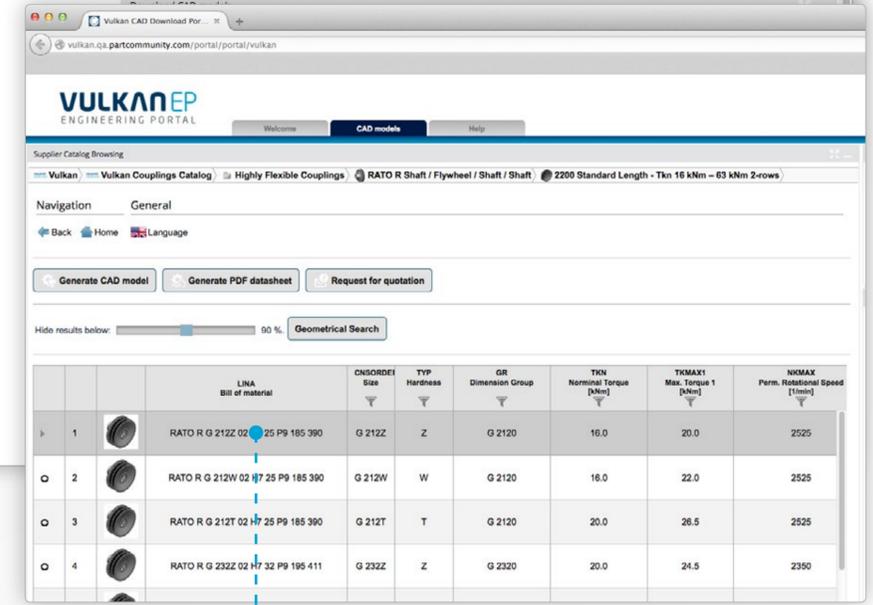
4.i



4.j



4.k



4.l

5. EDITING THE CONNECTION DIMENSIONS FOR THE HUB CONNECTION

Diameter of hub bore

- 5.a You can set the **Torque TN** for this unit using the slider.
- 5.b Please consider the calculated minimum diameter **D2min** for previously entered system torque TN here.
- 5.c You can select the required fit for the **Fit tolerance D2TOL** from the drop-down list.
- 5.d For changing the **width of hub keyway** according to DIN 6885, please choose „no“ in the dropdown list.

Name	Description	Value
CNSORDERNO	Size	G 212Z
TYP	Hardness	Z
GR	Dimension Group	G 2120
INFO1	Technical Specifications	PDF Info
INFO2	Explanations of Technical Data	PDF Info
TN	Equipment Torque	0.001 kNm
TKN	Norminal Torque	16.0 kNm
TKMAX1	Max. Torque 1	20.0 kNm

TN	Equipment Torque	0.001	0.001	16.000
TKN	Norminal Torque	16.0	kNm	
TKMAX1	Max. Torque 1	20.0	kNm	
TKMAX	Perm. Axial Shaft Displacement	25.5	mm	
KAA	Perm. Axial Shaft Displacement	5.0	mm	
KRR	Perm. Radial Shaft Displacement	10.0	mm	
CRDYN	Radial Stiffness	1.4	kN/mm	
D16	Bohrungsdurchmesser für D15	13.5	mm	
D14	Zentrierdurchmesser für Schwingradmechanik für das Element, Anschlussring zum Schwingrad	635	mm	
D15	Lockendurchmesser für Befestigungsschrauben zum Schwingrad	608	mm	
T	Lockflutung für Lockendurchmesser D15	32		
L1	Einbaulänge der Kupplung	390	mm	
L2	Nabenlänge (Abtriebsseite)	185	mm	
D1	größerer Durchmesser der Kupplung (Abtriebsseite)	640	mm	
D2	Bore diameter of hub	80	mm	
D2TOL	Tolerance für Fertigbohrung der Kupplungsnabe	H7		
PFB	Woth of hub keyway according to DIN 6885	17		
PFH	Nuthöhe für Nut nach DIN	27		

D2TOL	Toleranz für Fertigbohrung der Kupplungsnabe	H7
PFB	Width of hub keyway according to DIN 6885	25.0
PFH	Nuthöhe für Nut nach DIN	25.0 22.0 20.0
PASSUNGSART	Fitting tolerance of keyway	
PFBTOL	Fitting tolerance of finish bore	P9

5. EDITING THE CONNECTION DIMENSIONS FOR THE HUB CONNECTION

Fit of the key

5.e The fit of the key can be determined using the drop-down list for the type of fit.

Adjusting the hub length

5.f For changing the **standard length of the hub**, please choose „no“ in the dropdown list.

TN	Equipment Torque	0.001	0.001	16.000
TKN	Nominal Torque	16.0	kNm	
TKMAX1	Max. Torque 1	20.0	kNm	
NKMAX	Perm. Rotational Speed	2525	1/min	
KAA	Perm. Axial Shaft Displacement	5.0	mm	
KRR	Perm. Radial Shaft Displacement	10.0	mm	
CRDYN	Radial Stiffness	1.4	kN/mm	
D16	Bohrungsdurchmesser für D15	13.5	mm	
D14	Zentrierdurchmesser für Schwungradanschluss für das Element, Anschlussring zum Schwungrad	635	mm	
D15	Lochkreisdurchmesser für Befestigungsschrauben zum Schwungrad	608	mm	
T	Lochteilung für Lochkreisdurchmesser D15 Kundenanschluss Schwungrad (Antriebsseite)	32		
L1	Einbaulänge der Kupplung	390	mm	
L2	Nabenlänge (Abtriebsseite)	31	185	185
D1	größter Durchmesser der Kupplung (Abtriebsseite)	640	mm	
D2	Bore diameter of hub	80	80	160
D2TOL	Toleranz für Fertigbohrung der Kupplungsnahe	H7		
PFB	Width of hub keyway according to DIN 6885	25.0	mm	
PFH	Nuthöhe für Nut nach DIN	5.4	mm	
PASSUNGSART	Fitting tolerance of keyway	Fester Sitz		
PFBTOL	Fitting tolerance of finish bore	Fester Sitz		
PFHTOL	PFH_Tol	Leichter Sitz		
		Gleitsitz		
		Woltere		

D15	Lochkreisdurchmesser für Befestigungsschrauben zum Schwungrad	608	mm	
T	Lochteilung für Lochkreisdurchmesser D15 Kundenanschluss Schwungrad (Antriebsseite)	32		
L1	Einbaulänge der Kupplung	390	mm	
L2	Nabenlänge (Abtriebsseite)	31	185	185
D1	größter Durchmesser der Kupplung (Abtriebsseite)	640	mm	
D2	Bore diameter of hub	80	80	160
D2TOL	Toleranz für Fertigbohrung der Kupplungsnahe	H7		

6. GENERATING AN OFFER DRAWING (PDF DATA SHEET)

Once you have chosen the right coupling and finished editing it, you can generate an offer drawing (a PDF data sheet).

- 6.a Select the **Generate PDF data sheet** button.
- 6.b After the offer drawing has been generated, you can download the document via the **Download** link. The text description of the coupling contains all the parameters selected earlier.

The screenshot shows the 'Supplier Catalog Browsing' interface for a 'RATO R Shaft / Flywheel / Shaft / Shaft' with '2200 Standard Length - Tkn 16 kNm - 63 kNm 2-rows'. The 'Generate PDF data sheet' button is highlighted with a blue dashed line and a callout '6.a'. Below the table, a 'Generating CAD models' dialog box is open, showing the selected model 'RATO R G 212Z 02 H7 25 P9 185 390' with a 'Download' button and a 'Delete' button. A blue dashed line and callout '6.b' point to the 'Download' button. On the right, a 3D model of the coupling is visible in the '3D Viewer mode'.

Name	Description	Value
CNSORDERNO	Size	G 212Z
TYP	Hardness	Z
GR	Dimension Group	G 2120
INFO1	Technical Specifications	PDF Info
INFO2	Explanations of Technical Data	PDF Info
TN	Equipment Torque	0.001
TKN	Norminal Torque	16.0 kNm
TKMAX1	Max. Torque 1	20.0 kNm
NKMAX	Perm. Rotational Speed	2525 1/min
KAA	Perm. Axial Shaft Displacement	5.0 mm
KRR	Perm. Radial Shaft Displacement	10.0 mm
CRDYN	Radial Stiffness	1.4 kN/mm
D16	Bohrungsdurchmesser für D15	13.5 mm
D14	Zentrierdurchmesser für Schwungradanschluss für das Element, Anschlussring zum Schwungrad	635 mm

7. GENERATING AND DOWNLOADING CAD MODELS

- 7.a Select the **Generate CAD model** button.
- 7.b The system will start generating the CAD model in accordance with your defaults (**Pre-settings for CAD formats**) and a window will appear with instructions for creating further CAD models.
- 7.c When the process has finished, the CAD model created will be displayed with a name indicating the coupling type, size, rubber hardness and the parameters selected for the customer's connection. You can now download the CAD model via the **Download link**. Now close this window.

8. LOGOUT

- 8.a When you have finished downloading all the files you require and want to leave the portal, please logout.

The screenshot shows the 'Supplier Catalog Browsing' page for 'RATO R Shaft / Flywheel / Shaft / Shaft' with a '2200 Standard Length - Tkn 16 kNm - 63 kNm 2-rows' configuration. The 'Generate CAD model' button is highlighted with callout 7.a. A modal window titled 'Generating CAD models' is open, displaying instructions and a table of available CAD models. Callout 7.b points to the 'Download' link in the table. Callout 7.c points to the 'Download' link in the table. A 3D model of a coupling is visible in the bottom right corner, with callout 8.a pointing to it.

Name	Description	Value
CNSORDERNO	Size	
TYP	Hardness	
GR	Dimension Group	
INFO1	Technical Specifications	
INFO2	Explanations of Technical Data	
TN	Equipment Torque	16.000
TKN	Norminal Torque	
TKMAX1	Max. Torque 1	20.0 kNm
NKMAX	Perm. Rotational Speed	2525 1/min
KAA	Perm. Axial Shaft Displacement	5.0 mm
KRR	Perm. Radial Shaft Displacement	10.0 mm
CRDYN	Radial Stiffness	1.4 kN/mm
D16	Bohrungsdurchmesser für D15	13.5 mm
D14	Zentrierdurchmesser für Schwungradanschluss für das Element, Anschlussring zum Schwungrad	

Available CAD models	Format	Action
RATO R G 212Z 02 H7 25 P9 185 390 (0.001,80,Fester Sitz)	CAD	Check your emails Delete
RATO R G 212Z 02 H7 25 P9 185 390 (0.001,80,Fester Sitz)	CAD	Delete

VULKAN EP

ENGINEERING PORTAL

← START