Powertrain



CPV | Inquiry Form

PRODUCT

Type			Design			Pressure Level		Application	
Electronic Control Unit	○								
Hydraulic Pump	●	Single Unit	●	Axial Piston	●	Bent Axis	○	Medium Pressure ○	Single Circuit ●	Open Circuit ○
Hydraulic Motor	○	Double Unit	○	Internal Gear	○	Swash Plate	●	High Pressure ●	Dual Circuit ○	Closed Circuit ●
Control Valves	○			Open Center	○	Monoblock	○			
				Closed Center	○	Modular	○			
						Sandwich	○			

DOCUMENT

Specification		Test/Validation		Operation		Service		Release
Inquiry Form	●	Basic information	○	Basic instructions	○	Basic instructions	○	24th November 2026
Datasheet	○	Add./Cust. information	○	Add./Cust. instructions	○	Add./Cust. instructions	○	English

To ensure the currently valid database for your inquiry, please download the latest version of this document from LHY website.

To be able to save the content of the form fields without problems, please save this data sheet on local drive before starting to configure.

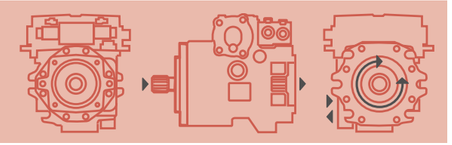
Check out the features and start configuring your product via model code.

Configuration | Modelcode & Availability | **Type**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

01.
MODELCODE ITEM

CPV



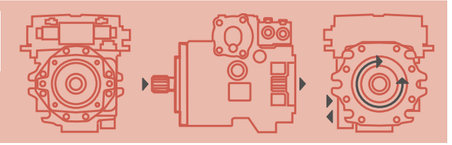
| Item | Feature | | |

Configuration | Modelcode & Availability | **Nominal size**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

02.
MODELCODE ITEM

Nominal Size



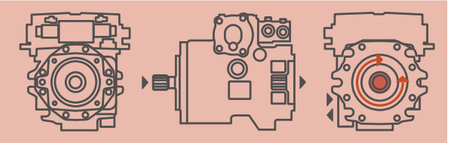
Item	Feature												
02.	Nominal size												
	Characteristic							Nominal size					Spec.
	Nominal size	Maximum Displacement Range [cc/rev]						045	055	065	085	100	115	145	175	
045	45	45.0						●								
055	55	55.5							●							
065	65	066.6								●						
085	85	085.6									●					
100	100	100.5										●				
115	115	115.4											●			
145	145	149.0												●		
175	175	175.0													○	

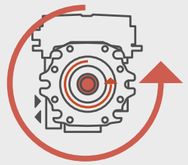
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Direction of Rotation**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

03. MODELCODE ITEM — Direction of Rotation



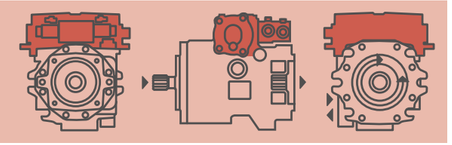
Item	Feature										
03.	Direction of Rotation										
	Characteristic					Nominal size					Spec.
						045	055	065	085	100	115	145	175	
L				**Left** hand/ counterclockwise rotation (with view to the drive shaft)		●	●	●	●	●	●	●	○	
R				**Right** hand/ clockwise rotation (with view to the drive shaft)		●	●	●	●	●	●	●	○	

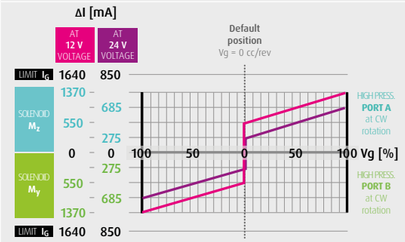
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Displacement Controller**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

04. MODELCODE ITEM — Displacement Controller



Item	Feature												
04.	Displacement controller												
	Characteristic				Nominal size								Spec.
	Load dependency	Piloting	Characteristic (schematically shown)		045	055	065	085	100	115	145	175	
EP	Proportional (load-independent)	electro-hydraulic			●	●	●	●	●	●	●	○	
HP	Proportional (load-independent)	hydraulic											
MP	Proportional (load-independent)	mechanic											

Item	Feature			Nominal size								Spec.
	Characteristic											
	Load dependency	Piloting	Characteristic (schematically shown)	045	055	065	085	100	115	145	175	
ED	Direct (load-dependent)	electro-hydraulic		●	●	○	●	●	●	●	○	
HD	Direct (load-dependent)	hydraulic										

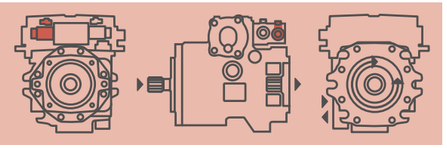
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Enable Controller Function**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

05. MODELCODE ITEM

Enable Controller Function



Item	Feature									
05.	Enable controller function									
	Characteristic					Nominal size				Spec.
						045	055	065	085	
0				**No** enable controller function		●	●	●	●	
F				Enable controller function This function is controlled electrically - regardless of electrical, hydraulical or mechanical displacement control See also modelcode item 07 for electric connectors for solenoids.		●	●	●	●	

Item									
						100	115	145	175	
0				**No** enable controller function		●	●	●	○	
F				Enable controller function This function is controlled electrically - regardless of electrical, hydraulical or mechanical displacement control See also modelcode item 07 for electric connectors for solenoids.		●	●	●	○	

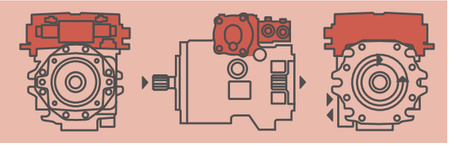
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Pressure Cut-off**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

06.
MODELCODE ITEM

Pressure Cut-off



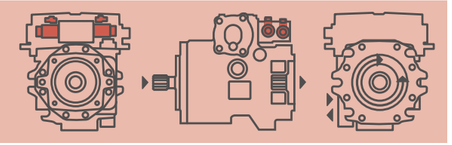
Item	Feature									
06.	Pressure cut-off									
	Characteristic		Nominal size							Spec.
			045	055	065	085	100	115	145	175	
0	No function No systemic control of the nominal pressure. Thus, without a pressure cut-off it must therefore be ensured by other means that the nominal permissible limit values of all systemcomponents are complied with under all operating conditions.		●	●	●	●	●	●	●	○	
P	Function in pump and motor mode The pressure cut-off controls the nominal system pressure (pnom). This refers to the pressure independent of the respective operating condition. This means that in both pump and motor operation, the pump is swiveled back towards „0“ when the nominal pressure is reached. Pressure cut-off settings please see item 24.		●	●	●	●	●	●	●	○	

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Electric Connectors for Solenoids**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

07. MODELCODE ITEM — Electric Connectors for Solenoids



Item	Feature																
07.	Electric connectors for solenoids																
	Characteristic																Spec.
		Electrically actuated function															
		4. Displacement controller	5. Enable function controller	Compatibility with Displ. Controller													
												045	055	065	085	100	115	145	175	
00	Your choice here is indicative for further config. steps. If you choose a sensor at modelcode item 17 &18, the same connector type must be selected there. A mix of different connector types is not possible.	**Not applicable**	**Not applicable**		EP	HP	MP	ED	HD	This selection applies if neither an electrically actuated displacement controller (see item 04) nor an enable controller function (see item 05) is chosen.		●	●	●	●	●	●	○	
						✓	✓		✓											
0D		**Deutsch**	**Deutsch**		EP	HP	MP	ED	HD			●	●	●	●	●	●	○	
					✓			✓											
0A		**AMP Junior Timer**	**AMP Junior Timer**		EP	HP	MP	ED	HD			●	●	●	●	●	●	○	
					✓														
ND		**Deutsch** with manual override	**Deutsch**		EP	HP	MP	ED	HD			●	●	●	●	●	●	○	
					✓														
NA		**AMP Junior Timer** with manual override	**AMP Junior Timer**		EP	HP	MP	ED	HD			●	●	●	●	●	●	○	
					✓														

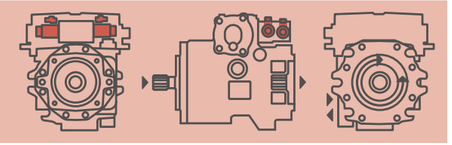
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Voltage for Solenoids**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

08.
MODELCODE ITEM

Voltage for Solenoids



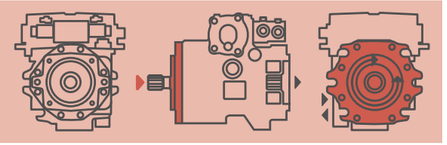
Item	Feature											
08.	Voltage for solenoids											
	Characteristic						Nominal size					Spec.
							045	055	065	085	100	115	145	175	
0				Not applicable			●	●	●	●	●	●	●	○	
1				12 V			●	●	●	●	●	●	●	○	
2				24 V			●	●	●	●	●	●	●	○	

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Front End - Mounting Flange**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

09. MODELCODE ITEM — Front End - Mounting Flange



Item	Feature													
09.	Front end - Mounting flange													
	Characteristic						Nominal size							Spec.
							045	055	065	085	100	115	145	175	
	Standard		Size [mm]	Horizontal hole pattern, Fixing points	Square hole pattern, Number of fixing points									
B2	ISO 3019-1 / SAE J744	SAE B	101	2	0		●	●						
C6		SAE C	127	2	4		●	●	●	●	●			
D6		SAE D	152	2	4						●	●	○	
E4		SAE E	165		4								○	

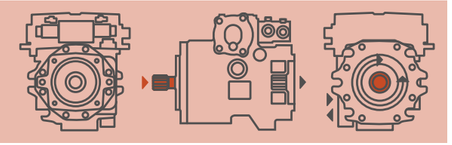
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Front End - Drive Shaft / Drive Flange**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

10. MODELCODE ITEM

Front End - Drive Shaft / Drive Flange



Item	Feature															
10.	Front end - Drive shaft / Drive flange															
	Characteristic														Nominal size	Spec.
	Standard		Number of teeth	Spline pitch/ module	Identification code										045 055 065 085 100 115 145 175	
S5	ISO 3019-1/ SAE J744		15	16/32	25-4										● ●	
S7			14	12/24	32-4										● ● ● ● ●	
S8			21	16/32	35-4										● ● ● ● ● ●	
V6			23	16/32	38-4										○ ○ ○ ● ● ○	
V7			27	16/32	44-4										● ○ ○	
T1			13	8/16	44-4										● ● ● ● ○	
T2			15	8/16	50-4										○ ● ○	

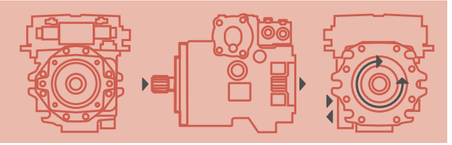
Item	Feature															
	Characteristic														Nominal size	Spec.
	Standard		Number of teeth	Spline pitch/ module	Identification code										045 055 065 085 100 115 145 175	
D3			14	2	W30										○ ○ ○	
D4			16	2	W35										● ● ● ● ●	
D5	DIN5480		18	2	W40										○ ○ ○ ○	
D6			21	2	W45										○ ○ ○ ● ○	
D7			24	2	W50										○ ○	
F4	SAE J1946													Companion flange Type A - 120x8xM10	○ ○ ● ● ● ○ ○ ○	

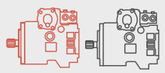
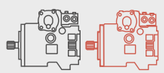
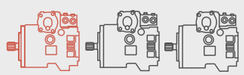
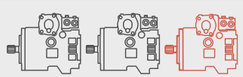
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **(Multiple) Pump Configuration**

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11. MODELCODE ITEM — (Multiple) Pump Configuration



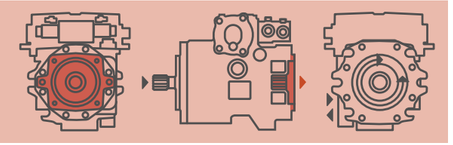
Item	Feature											Nominal size								
11.	(Multiple) pump configuration																			
		Position of the pump in context of your inquiry	Number of pumps in total	Will be supplied as an factory-assembled multiple pump configuration	**Choose PTO option compatible with subsequent pump (see model code items 12 & 13)!**	**Please observe the maximum permissible drive shaft torque!**	**Please note the maximum permissible moment of inertia when mounting the pumps to the prime mover!**					045	055	065	085	100	115	145	175
00		1	1						Single pump configuration			●	●	●	●	●	●	●	○
12		1	2	✓	!	!			Multiple pump configuration, Assembly in intermediate position		Please note! This choice only applies to multiple pump configurations factory-supplied by LHY. Multiple pump configurations that are assembled by the customer must be configured as single pumps and are not taken into account here. Each pump of the desired configuration must must be configured individually. In this document, you configure the pump whose position you choose with this modelcode item! Fill out 1 entire Modelcode & Availability sheet for each pump.	●	●	●	●	●	●	●	○
22		2	2	✓					Multiple pump configuration, Assembly in end position			●	●	●	●	●	●	●	○
13		1	3	✓	!	!	!		Multiple pump configuration, Assembly in intermediate position			●	●	●	●	●	●	●	○
23		2	3	✓	!	!	!		Multiple pump configuration, Assembly in intermediate position			●	●	●	●	●	●	●	○
33		3	3	✓			!		Multiple pump configuration, Assembly in end position			●	●	●	●	●	●	●	○

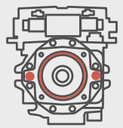
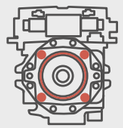
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

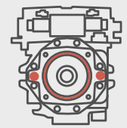
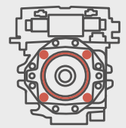
Configuration | Modelcode & Availability | **Power Takeoff (PTO) End - Mounting Flange**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

12. MODELCODE ITEM — Power Takeoff (PTO) End - Mounting Flange



Item	Feature																		
12.	Power takeoff (PTO) end - Mounting flange																		
	Characteristic																Nominal size		Spec.
	Multiple pump configurations																		
	LHY factory multiple pumps	Customer assembled multiple pumps	Standard		Size [mm]	Horizontal thread pattern, number of threats	Square thread pattern, number of threats	045	055	065	085	100	115	145	175				
00	-	-	-		-	-	Blind plate / No Power Takeoff (PTO)	●	●	●	●	●	●	○	○				
A2	✓	✓			SAE A	82	2x M10 14 mm deep	No threads	●	●	●	●	●	●	○	○			
B2	✓						2x M12, 16 mm deep	4x M12, 16 mm deep, not in use	●	●	●	●	●	●	●	○			
B4	✓		ISO 3019-1 / SAE J744		SAE B	101	2x M12, 16 mm deep, not in use	4x M12, 16 mm deep	●	●	●	●	●	●	●	○			
B6		✓					2x M12, 16 mm deep, not in use	4x M12, 16 mm deep	●	●	●	●	●	●	●	○			

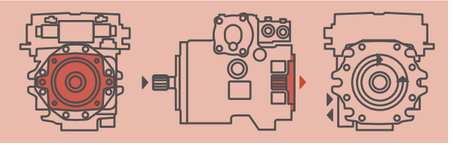
Item	Feature																		
	Characteristic																Nominal size		Spec.
	Multiple pump configurations																		
	LHY factory multiple pumps	Customer assembled multiple pumps	Standard		Size [mm]	Horizontal thread pattern, number of threats	Square thread pattern, number of threats	045	055	065	085	100	115	145	175				
C2	✓				127	2x M16, 22 mm deep	4x M16, 16 mm deep, not in use	○	○	●	●	●	●	○	○				
C4	✓			SAE C	127	2x M16, 22 mm deep, not in use	4x M12, 16 mm deep	○	○	●	●	●	●	○	○				
C6		✓	ISO 3019-1 / SAE J744		127	2x M16, 22 mm deep	4x M12, 16 mm deep	○	○	●	●	●	●	○	○				
D4	✓	✓		SAE D	152	No threads, not in use	4x M20, 22 mm deep						●	●	○				
E4	✓	✓		SAE E	165	No threads, not in use	4x M22								○				

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Power Takeoff (PTO) End - Drive Coupling**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

13. MODELCODE ITEM — Power Takeoff (PTO) End - Drive coupling



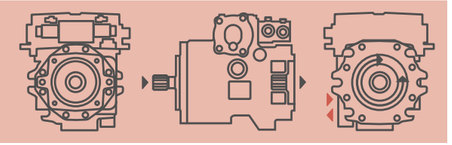
| Item | Feature | | |

Configuration | Modelcode & Availability | **High Pressure Work Ports**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

14. MODELCODE ITEM

High Pressure Work Ports



Item	Feature															
14.	High pressure work ports															
	Characteristic								Nominal size							Spec.
	Standard		Orientation						045	055	065	085	100	115	145	175	
			Radial														
R	ISO 6162-2		✓	SAE Flange ports, metric fastening threads					●	●	●	●	●	●	●	○	
T	ISO 11926 (ANSI)		✓	Threaded ports, O-ring sealed													

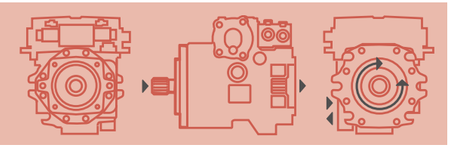
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Auxiliary Ports**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

15.
MODELCODE ITEM

Auxiliary Ports



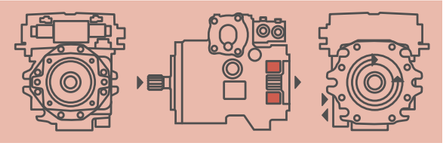
Item	Feature			Nominal size								Spec.
15.	Auxiliary ports											
	Characteristic			045	055	065	085	100	115	145	175	
	Standard											
M	ISO 6149-1		Threaded ports, ISO metric metric fastening threads Location and dimensions see installation drawing	●	●	●	●	●	●	●	○	
A	ISO 11926 (ANSI)		Threaded ports, O-ring sealed									

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Integrated Charge Pump**

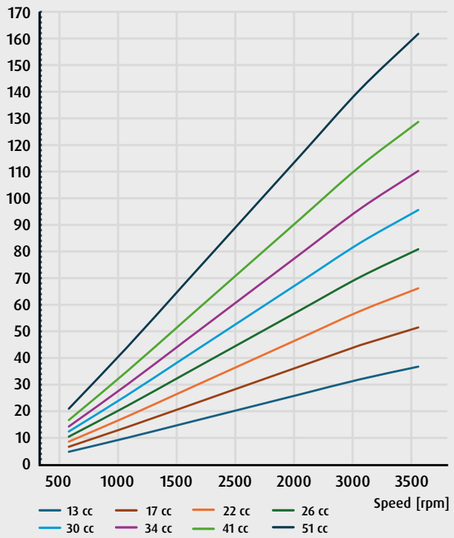
In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

16. Integrated Charge Pump



Item	Feature											
16.	Integrated charge pump											
	Characteristic		Nominal size									Spec.
	Displacement [cc/rev]		045	055	065	085	100	115	145	175		
00	00	No integrated charge pump	●	●	●	●	●	●	○	○		
13	13	Integrated charge pump, Design: Internal gear pump	●	●								
17	17		●	●	●	●	●					
22	22		●	●	●	●	●					
26	26				●	●	●	○				
30	30				●	●	●	●				
34	34							●				
41	41								●	○		
51	51								○	○		

Flow rate [l/min]

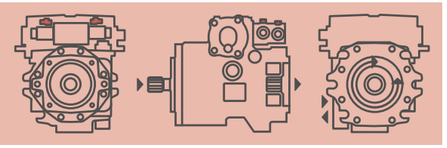


Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Swash Angle Sensor**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

17. MODELCODE ITEM — Swash Angle Sensor



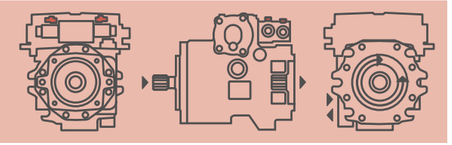
Item	Feature													
17.	Swash angle sensor													
	Characteristic					Nominal size								Spec.
	Swash angle sensor	Prepared for swash angle sensor	Without swash angle sensor			045	055	065	085	100	115	145	175	
00			✓	No swash angle sensor; Option does not allow the subsequent installation of the sensor		●	●	●	●	●	●	●	○	
AD	✓			Swash angle sensor; Function: Swash angle, Connector: Deutsch Please note! If you've already chosen a connector type at modelcode item 07, please don't mix it with a different type here.		●	●	●	●	●	●	●	○	
AA	✓			Swash angle sensor; Function: Swash angle, Connector: AMP Junior Timer Please note! If you've already chosen a connector type at modelcode item 07, please don't mix it with a different type here.										

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Pressure & Temperature Sensors**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

18. MODELCODE ITEM — Pressure & Temperature Sensors



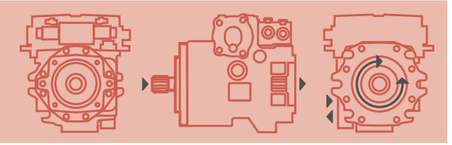
Item	Feature													Nominal size								Spec.
18.	Pressure & temperature sensors																					
	Characteristic																					
	Sensor Installation		Pressure monitoring		Temperature monitoring		Voltage (range)		Connector													
	Sensors installed	No Sensors installed	High pressure at port M_a	High pressure at port M_b	Temperature at port M_a	Temperature at port M_b	Power supply [VDC]	Output signal [VDC]	Deutsch					045	055	065	085	100	115	145	175	
00		✓											No pressure sensors; Option does allow the subsequent installation of pressure sensors, Mounting opening closed with plastic cover	●	●	●	●	●	●	●	○	
PD	✓		✓	✓			8...36	1...5	✓					○	○	○	○	○	○	○	○	
													2x Pressure sensors Please note! If you've already chosen a connector type at modelcode item 07, please don't mix it with a different type here.									
PP	✓		✓	✓			5	0.5...4.5	✓				2x Pressure sensors Please note! If you've already chosen a connector type at modelcode item 07, please don't mix it with a different type here.	○	○	○	○	○	○	○	○	
PT	✓		✓	✓	✓		5	0.5...4.5	✓				2x Pressure sensors with 1x Temperature sensor integrated in pressure sensor Please note! If you've already chosen a connector type at modelcode item 07, please don't mix it with a different type here.	○	○	○	○	○	○	○	○	

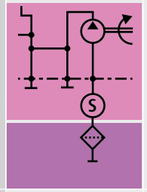
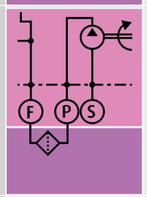
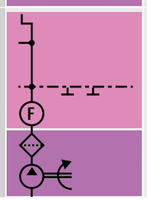
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

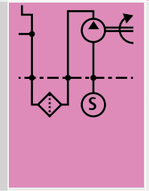
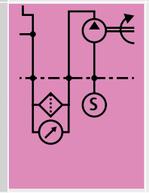
Configuration | Modelcode & Availability | **Oil Filtration**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

19. MODELCODE ITEM — Oil Filtration



Item	Feature	Nominal size								Spec.
19.	Oil filtration									
	Overview oil filtration: Hydraulic circuit	045	055	065	085	100	115	145	175	
	CPV-side equipment: Oil filter									
	CPV-side equipment: Clogging Ind.									
	CPV-side equipment: Inlet Port [F]									
	CPV-side equipment: Outlet Port [P]									
	CPV-side equipment: Inlet Port [S]									
	Customer-side requirements: Charge pump									
	Customer-side requirements: Oil filter									
S	 Remote filtration via suction line							●	○	
	Compatibility with charge pump: 00 13 17 22 26 30 34 41 51		✓	✓	✓	✓	✓	✓	✓	
D	 Remote filtration via charge pressure line							●	○	
	Compatibility with charge pump: 00 13 17 22 26 30 34 41 51		✓	✓	✓	✓	✓	✓	✓	
E	 Remote filtration via charge pressure line, **remote charge pump**							●	○	
	Compatibility with charge pump: 00 13 17 22 26 30 34 41 51	✓								

Item	Feature	Nominal size								Spec.
	Overview oil filtration: Hydraulic circuit	045	055	065	085	100	115	145	175	
	CPV-side equipment: Oil filter									
	CPV-side equipment: Clogging Ind.									
	CPV-side equipment: Inlet Port [F]									
	CPV-side equipment: Outlet Port [P]									
	CPV-side equipment: Inlet Port [S]									
	Customer-side requirements: Charge pump									
	Customer-side requirements: Oil filter									
F	 Integrated filtration via charge pressure line							●	○	
	Compatibility with charge pump: 00 13 17 22 26 30 34 41 51		✓	✓	✓	✓	✓	✓	✓	
C	 Integrated filtration via charge pressure line with electrical clogging indication signal							○	○	
	Compatibility with charge pump: 00 13 17 22 26 30 34 41 51		✓	✓	✓	✓	✓	✓	✓	

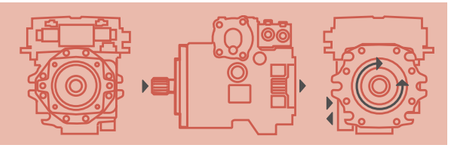
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Shaft Seal**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

20.
MODELCODE ITEM

Shaft seal



Item	Feature										
20.	Shaft seal										
	Characteristic						**Nominal size**				**Spec.**
							045	055	065	085	
0				Standard			●	●	●	●	
H				Heavy duty, Option requires consultation with LHY Powertrain and detailed specifications			○	○	○	●	

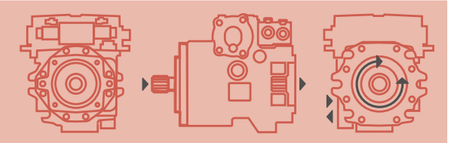
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Additional Option 1**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

21. MODELCODE ITEM

Additional Option 1



Item	Feature										
21.	Additional option 1										
	Characteristic				**Nominal size**						**Spec.**
					045	055	065	085	100	115	145	175	
00				Not applicable	●	●	●	●	●	●	●	○	

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

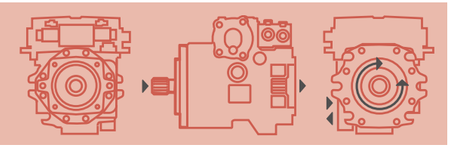
Configuration | Modelcode & Availability | **Seal Material**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

22. MODELCODE ITEM

V

Seal Material



Item	Feature									
22.	Seal material									
	Characteristic						Nominal size			Spec.
							045	055	065	
V				FKM (Viton)			●	●	●	

				085
				●
				●

				100
				●
				●

				115
				●
				●

				145
				●
				●

				175
				○
				○

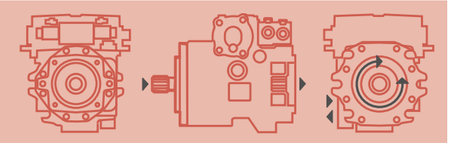
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Corrosion Protection or Paint**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

23. MODELCODE ITEM

Corrosion Protection or Paint



Item	Feature													
23.	Corrosion protection or paint													
	Characteristic				Nominal size									Spec.
	Corrosion protection	Primer	Top coat		045	055	065	085	100	115	145	175		
R00	Anticorit RPO-3002			Corrosion protection, no primer or paint, 6 month active	●	●	●	●	●	●	●	○		
P01		oxide red, RAL 3009		Primer	●	●	●	●	●	●	●	○		
P04		pure white RAL 9010		Primer	●	●	●	●	●	●	●	○		
P06		traffic grey B RAL 7043		Primer (default primer)	●	●	●	●	●	●	●	○		
V03		grey, RAL 7043	jet black, RAL 9005	2-coat paint	●	●	●	●	●	●	●	○		
V07		grey, RAL 7043	slate grey, RAL 7015	2-coat paint	●	●	●	●	●	●	●	○		

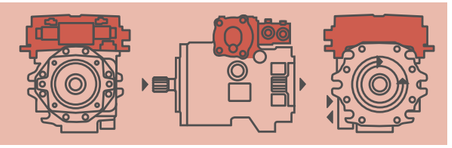
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Primary Pressure Relief & Pressure Cut-Off**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

24. MODELCODE ITEM

Primary Pressure Relief & Pressure Cut-off



Item	Characteristics			Nominal size								Spec.
24.	Primary pressure relief & pressure cut-off											
	Prim. pressure relief valve (obligatory) Max. differential pressure ΔpHD [bar]	**Pressure cut-off (optional)** System pressure at workport pA, B [bar]		Repeated listing of the choice from the left side (for a better overview)	045	055	065	085	100	115	145	175	
495	495	470		495	●		●	●		●	●	○	
465	465	440		465	●	●	●	●	●	●	●	○	
445	445	420		445	●	●	●	●	●	●	●	○	
435	435	410		435	●	●	●	●	●	●	●	○	
420	420	395		420	●	●	●	●	●	●	●	○	
380	380	355		380	●	●	●	●	●	●	●	○	
350	350	325		350	●	●	●	●	●	●	●	○	
305	305	280		305	○	○	○	○	○				
300	300	275		300						○	○	○	
250	250	225		250	○	○	○	○	○	○	○	○	
200	200	175		200	○	○	○	○	○	○	○	○	
150	150	125		150	○	○	○	○	○	○	○	○	

Purpose

The obligatory primary pressure relief valve protects the hydraulic system from excessive pressure. An optional pressure cut-off can be used to additionally limit the system pressure. Pressure relief and pressure cut-off settings are usually provided as a matched pair. Alternative combinations are possible but require consultation with LHY.

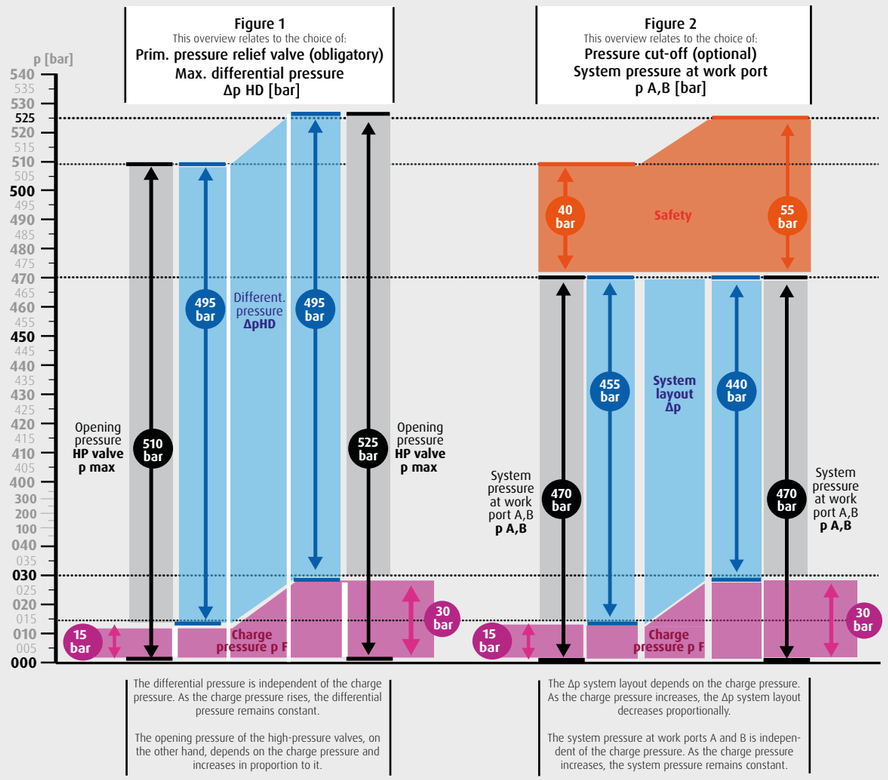
Key Facts

- The specified pressure limits must be observed under all operating conditions.
- Charge pressure affects both the maximum opening pressure Hp valve pmax and the system layout differential pressure.
- LHY recommends a minimum safety margin of 40 bar between the pressure cut-off and the primary pressure relieve valve setting.
- Without PCO, a safety distance of minimum 30 bar is required between the maximum system pressure at work port pA,B and the opening pressure HP valve pmax at any time.
- A minimum charge pressure of 15 bar and maximum of 30 bar should be ensured under all operating conditions.

Selecting the Right Setting

1. Verify the maximum allowable operating limits for your frame size.
2. Understand the dependencies between the various pressure settings as shown in the figures 1 and 2.
3. Choose the correct setting for your application or hydraulic system considering as well your charge pressure relief valve setting in Modelcode item 25.

If you have not selected a pressure cut-off (model code item 06), the system pressure will not be regulated. Even without a pressure cut-off, it is still necessary to ensure that the permissible rated values of all system components are maintained under all operating conditions!



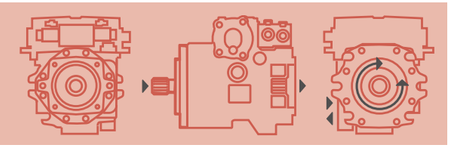
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Charge Pressure Relief Setting**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

25. MODELCODE ITEM

Charge Pressure Relief Setting



Item	Feature																	
25.	Charge pressure relief setting																	
	Characteristic															Nominal size		Spec.
																045	055	065	085	100	115	145	175	
19					**19 bar**											○	○	○	○	○				
					Compatibility with Displ. Controller																			
					EP		HP		MP		ED		HD											
					✓		✓		✓				✓											
23					**23 bar**																	●	●	○
					Compatibility with Displ. Controller																			
					EP		HP		MP		ED		HD											
					✓		✓		✓		✓		✓											
24					**24 bar**											●	●	●	●	●				
					Compatibility with Displ. Controller																			
					EP		HP		MP		ED		HD											
					✓		✓		✓		✓		✓											
27					**27 bar**											○	○	○	○	○	○	○		
					Compatibility with Displ. Controller																			
					EP		HP		MP		ED		HD											
					✓		✓		✓		✓		✓											

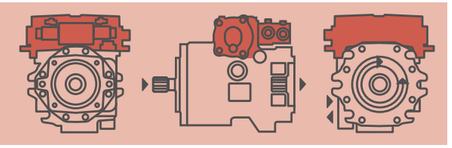
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Maximum Displacement (Vgmax)**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

26. MODELCODE ITEM

Maximum Displacement (Vgmax)



Item	Feature																
26.	Maximum Displacement (Vgmax)																
	Characteristic															Nominal size	Spec.
	Fixed setting	Individual setting	Comes with adjustment screw	Subsequent changes possible	Set value [cc/rev]											045 055 065 085 100 115 145 175	
[999]	✓				No individual value/ Vgmax is preset at the factory, pump is delivered without adjustment screw	045.0										●	
						055.5										○ ●	
						066.6										○ ○ ●	
						085.6										○ ○ ○ ●	
						100.5										○ ○ ○ ○ ●	
						115.4										○ ○ ○ ○ ○ ●	
						149										○ ○ ○ ○ ○ ○ ●	
						175										○ ○ ○ ○ ○ ○ ○ ○	
[VALUE]					Individual value (numeric, 3 digits, only integer values), pump is delivered with adjustment screw	025 to 055										● ●	
						045 to 066										○ ● ●	
						067 to 085										○ ○ ● ●	
						086 to 100										○ ○ ○ ● ●	
						101 to 115										○ ○ ○ ○ ● ●	
						116 to 149										○ ○ ○ ○ ○ ● ●	
						150 to 175										○ ○ ○ ○ ○ ○ ● ●	

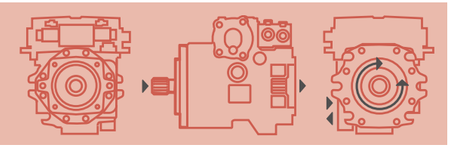
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Additional Setting Option 1**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

27.
MODELCODE ITEM

Additional Setting Option 1



Item	Feature									
27.	Additional setting option 1									
	Characteristic				Nominal size					Spec.
					045	055	065	085	100	115	145	175	
99	Not applicable				●	●	●	●	●	●	●	○	

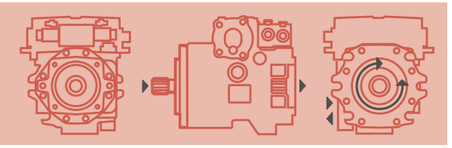
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Additional Setting Option 2**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

28.
MODELCODE ITEM

Addtiional Setting Option 2



Item	Feature										
28.	Additional setting option 2										
	Characteristic							Nominal size			Spec.
								045	055	065 085 100 115 145 175	
99				Not applicable				●	●	● ● ● ● ● ● ○	

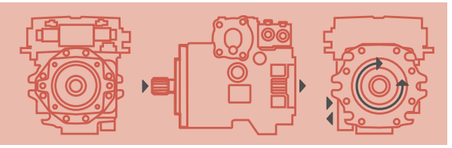
Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Additional Setting Option 3**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

29.
MODELCODE ITEM

Additional Setting Option 3



Item	Feature									
29.	Additional setting option 3									
	Characteristic				Nominal size					Spec.
					045	055	065	085	100	115	145	175	
99	Not applicable				●	●	●	●	●	●	●	○	

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Model Code Release**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

30. **A5**

Model Code Release

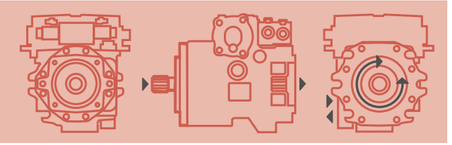
Item	Feature
30.	Model code release
	Characteristic
	Release date
A5	November 2026

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | Modelcode & Availability | **Variant Configuration**

In the following you will find the configuration features including brief information. In order to be able to save your choice without problems, please save this document on a local drive before starting and after completing the configuration. Set your choice via the dropdown menus in the upper area. In order to ensure a feasible configuration, please consider the availability and compatibility of the individual items with the relevant nominal size. In the section [Your choice & inquiry] these items are then listed as a coherent model code. This code serves for further processing of your inquiry.

31. MODELCODE ITEM — Variant Configuration



Item	Feature										
31.	Variant configuration (may require further information)										
					045	055	065	085	100	115	145	175
0	Standard execution			(Your desired configuration corresponds to the availabilities and combinations listed in this document.)	●	●	●	●	●	●	●	○
S	Special version			(Your desired configuration does not correspond to the availabilities shown in this document and/or does not correspond to the possible combinations shown.) Please explain your desired configuration in more detail under “Your choice & inquiry“	○	○	○	○	○	○	○	○

Symbol	045 055 145 175	●	●	○
Status	Nominal sizes at development stage/ prototype status	Option with a tendency towards higher & more rapid availability		
Availability	Availability refers to a limited volume of units	✓	✓	Upon request

Configuration | **Your Choice & Inquiry**

In the following you will find the choice of items you've made in the section [Modelcode & Availability]. In addition, you will find form fields for your personal data. In order to be able to save the content of the form fields without problems, please save this data sheet on a local drive before starting and after completing the configuration. Data may be lost when working in a browser-based environment. Please note! The form fields should be filled in as completely as possible to ensure smooth processing of your inquiry. In addition, this form is intended for inquiry purposes and to facilitate communication. However, it does not represent a binding order form.

TYPE	NOMINAL SIZE	DIR. OF ROT.	CONTROL			ELECTRICAL INTERFACE		MECH. INTERFACE - FRONT END		MULTIPLE PUMP*	PTO
01. CPV	02.	03.	04.	05.	06.	07.	08.	09.	10.	11.	12.

PTO	HYDRAULIC INTERFACE		CHARGE PUMP	SENSORS		FILTRATION	SHAFT SEAL	ADD. OPTION	SEAL MATERIAL	SURF. TREATM.	SETTINGS
13.	14.	15.	16.	17.	18.	19.	20.	21.	22. V	23.	24.

SETTINGS		ADD. SETTING OPTIONS			MODELCODE	VARIANT CONF.
25.	26.	27.	28.	29.	30. A5	31.

Your company	Name		
	Customer ID	(if available)	
	Postal address	Street	
		City area/District	
		City/Town/Village	
		County	
		Postal code	
		Country	
Your contact details	Name		
	Email		
	Phone	Landline	
		Mobile	

Your configuration	(Multiple) pump configuration	according to model code item 11.	
Your demand	Planned quantity/ year	Number of units	
Your application (optional)	Type of application		
	Machine weight	t	
	Power of the drive motor	kW	
	Functional area of the inquired product	Hydraulic circuit	
		Operation	
		Function	
Your notes (optional)			

Please note! In order to be able to save the content of the form fields without problems, please save this data sheet before sending.

To be able to save the content of the form fields without problems, please save this data sheet on local drive before starting to configure.

Submit the completed form. Your LHY sales partner will come back to you with an offer timely.

*In the case of a multiple pump configuration chosen here (choice 12, 22, 13, 23 or 33), please ensure to fill out and submit one inquiry form for each pump of the configuration.

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