

Bosch Rexroth G10A4-1X/UN1 1/16-12UNF20-S directional valve subplate

Manufacturer: Bosch Rexroth
Manufacturer part number / published order designation: R900487398
Published model: G10A4-1X/UN1 1/16-12UNF20-S

About this compilation

Prepared by Hydmaster from selected manufacturer documentation. Original technical pages follow without cropped drawings, rewritten data or altered units. This cover and index are Hydmaster editorial material, not a manufacturer-issued exact-execution datasheet.

Coverage: selected pages relevant to the identified size and configuration. Other options or neighbouring models retained on an original page apply only where explicitly identified.

Execution notes and conditions

Base material, coating composition, seal material and overall assembled-valve rating are not established by these rows.

The manufacturer detailed row includes the complete suffix omitted by the overview/supplier short designation; the exact material number binds that literal row, not an invented option combination.

Source-page index

Source page numbers below are physical pages of each complete original PDF. The original printed page labels and technical content remain unchanged. Compiled page numbers count this cover/index.

Source A: Bosch Rexroth Subplates Re45100 2019

Original pages	Compiled pages	Relevant content
1-4	2-5	Manufacturer G-1X definitions and actual thread/design option key
20	6	Exact R900487398 detailed row and associated size 10 mounting/port drawing; use only this row
51	7	Nominal-size A-pattern valve-interface assignment; other valve families are contextual

Subplates

RE 45100

Edition: 2019-05

Replaces: 2018-10



H8056

- Size 4 ... 32
- Component series 1X

Features

The subplates are intended for the set-up of single valves and vertical stackings and are equipped with all ports. The delivery range includes sizes 4 ... 32 as a standard.

- Ready for connection
- Compact design
- Large number of variants
- Broad field of application
- Various frame sizes

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Ordering code

01	02	03	04	05	06	07	08	09	10	11
G				-	1X	/			-	

Device type

01	Subplate	G
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Size

02	NG4	04
	NG5	05
	NG6	06
	NG10	10
	NG16	16
	NG20	20
	NG25	25
	NG30	30
	NG32	32

Porting pattern

03	Directional valves with one tank port, flow control valves	A
	Isolator, directional, pressure and flow control valves	C
	Isolator, directional, pressure and flow control valves	D
	Pressure relief valves	E
	Flow control valves	G
	Rexroth-specific hole pattern	R
	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03, with 4 mm locating pin bore	U
	Valves up to 630 bar	V

Number of main ports

04	2 main ports A, B / X, Y / P, T / P, A	2
	3 main ports P, A, T	3
	4 main ports P, A, B, T	4
05	Component series 10 ... 19 (10 ... 19: unchanged installation and connection dimensions)	1X

Order example:

G10A2-1X/G3/8G1/4-SLJ5-SO699

Other versions are only possible after consultation.

Ordering code

01	02	03	04	05			06		07		08	09	10	11
G				-	1X	/				-				-

Actuator ports P, A, B, T

06	Thread G1/4	G1/4
	Thread G3/8	G3/8
	Thread G3/4	G3/4
	Thread G1/2	G1/2
	Thread G1	G1
	Thread G1 1/4	G1 1/4
	Thread G1 1/2	G1 1/2
	Thread M14	M14
	Thread M18	M18
	Thread M22	M22
	Thread M27	M27
	Thread M33	M33
	Thread M48	M48
	Thread NPT 1/2	NPT 1/2
	Thread NPT 1	NPT 1
	Thread 7/8-12UNF	UNF7/8-12
	Thread 3/4-16UNF	UNF3/4-16
	Thread 9/16-18UNF	UNF9/16-18
	Thread 7/8-20UNF	UNF7/8-20
	Thread 7/16-20UNF	UNF7/16-20
	Thread 1 1/16-12UN	UN1 1/16-12
	Thread 1 5/16-12UN	UN1 5/16-12
	Thread 1 5/8-12 UN	UN1 5/8-12
	Thread 1 7/8-12 UN	UN1 7/8-12
	Flange ISO 6164 DN19	FL19
	Flange ISO 6164 DN32	FL32
	Flange ISO 6164 DN51	FL51

Control system ports X, Y, L

07	Thread G1/4	G1/4
	Thread G3/8	G3/8
	Thread G1/2	G1/2
	Thread M14	M14
	Thread M18	M18
	Thread 7/16-20UNF	UNF 20
	Thread 9/16-18UNF	UNF 18

Porting pattern

08	Rear ports	no code
	Lateral ports	S

Design (outer dimensions)

09	Standard size	no code
	Small design "mini"	M
	Large design "large"	L

Corrosion resistance

10	Standard	no code
	Improved corrosion protection (240 h in salt spray test according to DIN EN ISO 9227)	J3
	Maximum corrosion protection (720 h in salt spray test according to DIN EN ISO 9227)	J5

Ordering code

01	02	03	04	05	06	07	08	09	10	11
G				-	1X	/			-	

Special versions

11	With additional port L	SO003
	Special hole pattern with leakage oil connection on top for 5-4WE 10 -5X/...	SO331
	High-pressure valves 500 bar	SO699
	Special hole pattern without port X but with leakage oil connection such as standard hole pattern for 5-4 WE 10 ...-5X/...	SO771
	Name plate on the opposite side	SO001

Technical data

(for applications outside these values, please consult us!)

general	
Installation position	any (observe the valve details)
hydraulic	
Operating pressure	see details of the relevant subplate
Maximum admissible degree of contamination of the hydraulic fluid Cleanliness class according to ISO 4406 (c)	The cleanliness classes specified for the components must be adhered to in hydraulic systems. See data sheet of the valves to be installed.

Hydraulic fluid	Classification	Suitable sealing materials	Standards	Data sheet
Mineral oils	HL, HLP, HLPD, HVLP, HVLPD	NBR, FKM	DIN 51524	90220
Bio-degradable ¹⁾	▶ Insoluble in water	HETG	ISO 15380	90221
		HEES		
	▶ Soluble in water	HEPG	ISO 15380	
Flame-resistant	▶ Water-free	HFDU (glycol base)	ISO 12922	90222
		HFDU (ester base) ¹⁾		
	▶ Containing water ¹⁾	HFC (Fuchs Hydrotherm 46M, Petrofer Ultra Safe 620)	ISO 12922	90223



Important information on hydraulic fluids:

- ▶ For further information and data on the use of other hydraulic fluids, please refer to the data sheets above or contact us.
- ▶ There may be limitations regarding the technical valve data (temperature, pressure range, life cycle, maintenance intervals, etc.).
- ▶ The ignition temperature of the hydraulic fluid used must be 50 K higher than the maximum solenoid surface temperature.

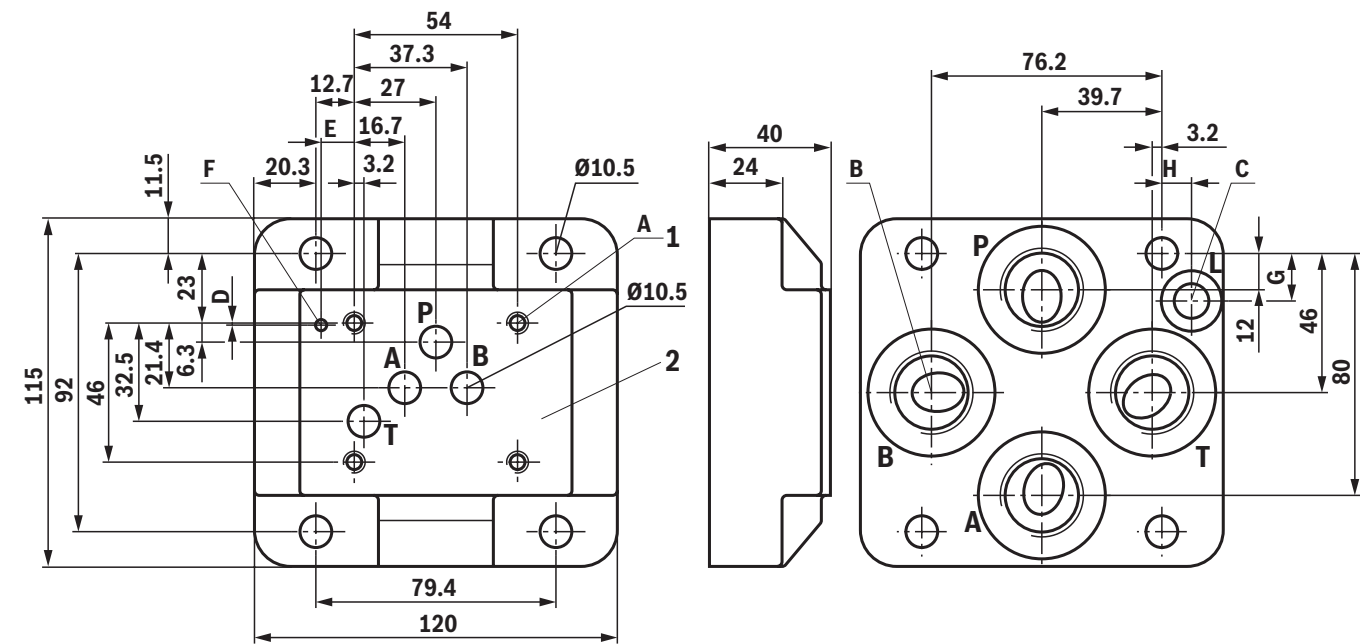
▶ Flame-resistant – containing water:

- Life cycle as compared to operation with mineral oil HL, HLP 30 ... 100%
- Maximum hydraulic fluid temperature 60 °C

¹⁾ Small amounts of dissolved zinc may get into the hydraulic system during use.

Uncoated subplates available on request.

Dimensions
(dimensions in mm)



- 1 Valve mounting thread
- 2 Valve contact surface

Denomination	Material number	A	B	
			Thread	Recess Ø
G10A4-1X/G1/2-L	R900568135	M6; 12 deep	G1/2	34
G10A4-1X/G1/2G1/4-SO331	R901098950	M6; 12 deep	G1/2	34
G10A4-1X/G3/4	R900467259	M6; 12 deep	G3/4	42
G10A4-1X/G3/4-J3	R900382284	M6; 12 deep	G3/4	42
G10A4-1X/G3/4G1/4-SO331	R901088735	M6; 12 deep	G3/4	42
G10A4-1X/UN1 1/16-12UNF20-S	R900487398	1/4-20UNC; 12 deep	1 1/16-12UN	41

Denomination	C		D	E	F	G	H	Weight in kg	p _{max} in bar
	Thread	Recess Ø							
G10A4-1X/G1/2-L	–	–	–	–	–	–	–	3.0	315
G10A4-1X/G1/2G1/4-SO331	G1/4	20	0.5	11	3.7	16	9.8	3.0	
G10A4-1X/G3/4	–	–	–	–	–	–	–	3.0	
G10A4-1X/G3/4-J3	–	–	–	–	–	–	–	3.0	
G10A4-1X/G3/4G1/4-SO331	G1/4	20	0.5	11	3.7	16	9.8	3.0	
G10A4-1X/UN1 1/16-12	–	–	–	–	–	–	–	3.0	

Assignment of the valves according to size and porting pattern

Valve type	Data sheet	ISO / DIN / Rexroth-specific hole pattern	Denomination in the type code
4WE 10 ..4X/...	23327	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WE 10 ..5X/...	23340	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WE 6 ..6X/...	23178	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WE 6 ..73.6X/...A12	23183	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WEH 10 ..4X/...	24751	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WEH 16 ..6X/...	24751	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WEH 22 ..7X/...	24751	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WEH 32 ..6X/...	24751	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A
4WH 10 ..4X/...	24751	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WH 16 ..6X/...	24751	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WH 22 ..7X/...	24751	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WH 32 ..6X/...	24751	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A
4WH 6 ..5X/...	22282	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WHH 10 ..4X/...	24851	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WHH 16 ..7X/...	24851	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WHH 22 ..7X/...	24851	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WHH 25 ..6X/...	24851	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WHH 32 ..6X/...	24851	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A
4WM 6 ..5X/...	22280	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WM..H 10 ..4X/...	24851	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WM..H 16 ..7X/...	24851	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WM..H 22 ..7X/...	24851	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WM..H 25 ..6X/...	24851	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WM..H 32 ..6X/...	24851	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A
4WMM 10 ..5X/...	22334	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WMR. 6 ..5X/...	22284	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WN 10 ..5X/...	22334	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WP 10 ..5X/...	22334	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WP 6 ..6X/...	22282	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WPH 10 ..4X/...	24851	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WPH 16 ..7X/...	24851	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WPH 22 ..7X/...	24851	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WPH 25 ..6X/...	24851	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WPH 32 ..6X/...	24851	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A
4WRA 6 ...2X/...	29055	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WRA. 10 ...2X/...	29055	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WRDE 10 ...5X/...	29093	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WRDE 16 ...5X/...	29093	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WRDE 25 ...5X/...	29093	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WRDE 32 ...5X/...	29093	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A
4WRDU 16 ...5X/...	29093	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WRDU 25 ...5X/...	29093	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WRDU 32 ...5X/...	29093	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A
4WRE 10 ...2X/...	29061	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WRE 6 ...2X/...	29061	ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03	06A (06U)
4WRGE 10 ...1X/...	29070	ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05	10A
4WRGE 16 ...1X/...	29070	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WRGE 25 ...1X/...	29070	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WRH 16 ...7X/...	29115	ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07	16A
4WRH 25 ...7X/...	29115	ISO 4401-08-08-0-05 and NFPA T3.5.1 R2	25A
4WRH 32 ...7X/...	29115	ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10	32A