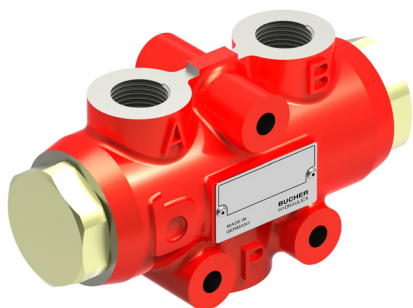


Flow Divider

Bi-directional
Series MTD A



- Robust, simple and reliable
- Easy to service
- Flows can be split or merged with accuracy (divide/combine functions).
- The flow division ratio can be altered to suit customer requirements.

1 Description

1.1 General

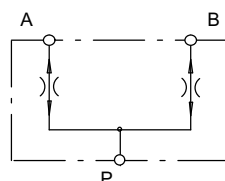
Series MTD A units are flow dividing valves that operate automatically. They are intended for use with hydraulic fluids. They divide a flow, the total rate of which may be varied, into two usually equal parts. When flow passes through a valve in the opposite direction, the two part-flows are combined into one single flow (added). The dividing and combining functions are largely independent of the pressures of the two divided flows and of the fluid viscosity. If the valve has an unequal division ratio, the larger part-flow must always

be through port B. In order for the valve to work properly, a continuous flow is required at all ports. For example, if one actuator is no longer able to move, then the other part-flow will also be restricted. If the two actuators served by the flow divider operate at different pressures, then the pressure of the total flow entering the valve will correspond to the higher of the two actuator pressures. Large pressure differences may give rise to significant heat generation, which must be taken into consideration when designing the system.

1.2 Application examples

- Work access platforms
- Lifting platform
- Harvesters
- Municipal equipment
- Snow/ice clearing equipment
- Wood chippers
- Road rollers
- Tail lifts

2 Symbols



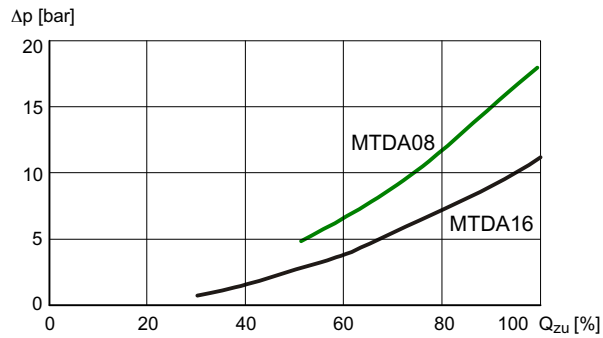
3 Technical data

General characteristics	Description, value, unit
Maximum operating pressure	315 bar
Oil temperature range	-20 °C ... +80 °C
Viscosity range	10 mm ² /s ... 300 mm ² /s
Minimum fluid cleanliness	ISO 4406 class 20/18/15 (NAS 1638 class 9)
Nitrile seals	NBR (Nitril-Butadin-Kautschuk)

4 Characteristic curves

4.1 Pressure drop characteristics (Δp)

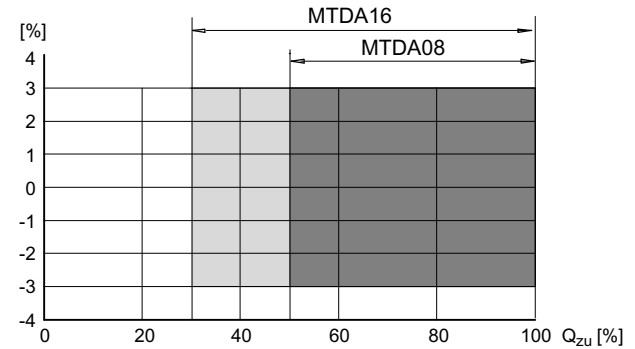
Pressure drop v. flow rate with oil viscosity of 35 mm²/s



IMPORTANT : - Q_{zu} = really inlet flow (100% = maximum control flow)
- Higher division accuracy on enquiry

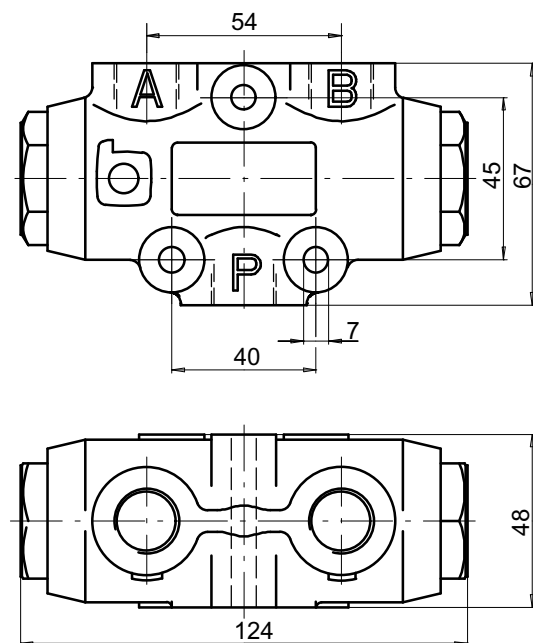
4.2 Division accuracy [%]

Division accuracy + 3 % of the max. flow rate, based on control flow range of the respective flow divider (see example abs. 6) with oil viscosity of 35 mm²/s

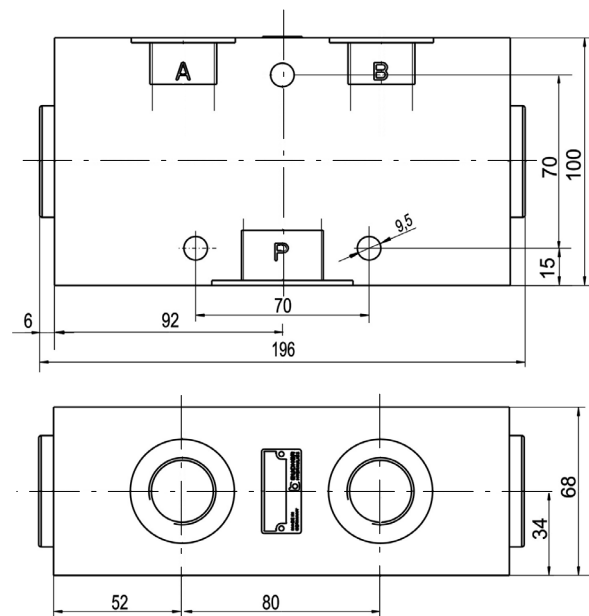


5 Dimensions in mm

5.1 MTDA08



5.2 MTDA16



	MTDA08	MTDA16
Weights	1,5 kg	8 kg
A, B, P	see section 6	

6 Ordering code

		M	T	D	A	0	8	-	0	0	4	M	3	0	/					
Flow divider																				
Bi-directional																				
Threaded ports																				
Nominal size	08																			
	16																			
Control flow range:																				
Nominal Size 08									Nominal Size 16											
004	=	2-4 l/min	025	=	12-25 l/min	100	=	35-100 l/min	120	=	40-120 l/min	160	=	50-160 l/min	200	=	60-200 l/min	250	=	75-250 l/min
006	=	3-6 l/min	032	=	16-32 l/min	120	=	40-120 l/min	160	=	50-160 l/min	200	=	60-200 l/min	250	=	75-250 l/min			
008	=	4-8 l/min	050	=	25-50 l/min	160	=	50-160 l/min	200	=	60-200 l/min	250	=	75-250 l/min						
012	=	6-12 l/min	075	=	37-75 l/min															
016	=	8-16 l/min	100	=	50-100 l/min															
Port threads																				
M = Metric						R = Inch														
Flow range		P		A + B		P		A + B		P		A + B		P		A + B				
004-025		M18 x 1,5		M18 x 1,5		G 3/8"		G 3/8"		G 3/8"		G 3/8"		G 3/8"		G 3/8"				
032-100		M22 x 1,5		M18 x 1,5		G 1/2"		G 3/8"		G 1/2"		G 3/8"		G 1/2"		G 3/8"				
100-120		M27 x 2		M22 x 1,5		G 3/4"		G 1/2"		G 3/4"		G 1/2"		G 3/4"		G 1/2"				
160-250		M33 x 2		M27 x 2		G 1"		G 3/4"		G 1"		G 3/4"		G 1"		G 3/4"				
Division ratio, see section 6.1																				
Variants / special features (to be inserted by the factory)																				

6.1 Unequal division on enquiry

In the case of unequal division, the division ratio is shown in the flow divider model code

e. g. 13 = 1 : 1,3
 20 = 1 : 2
 30 = 1 : 3

Ordering example:

Flow range: Q_{zu} 60 l/min with unequal division of 1 : 3

Flow divider: **MTDA08-075M30**

At an inlet flow rate of 60 l/min the unequal division prod. : 15 l/min at port A and 45 l/min at port B

6.2 Example for division accuracy

Flow range: Q_{zu} 60 l/min, required division of $Q_A/Q_B = 30$ l/min (division 1 : 1)

Flow divider: **MTDA08-075M**

flow range 37...75 l/min
 max. flow rate 75 l/min

max. allowable deviation = 75 l/min x ±3% = ±2,25 l/min

resulting part- flow rate at Q_{zu} 60 l/min:

Port A - $Q_{min} = 27,75$ l/min / $Q_{max} = 32,25$ l/min

Port B - $Q_{min} = 27,75$ l/min / $Q_{max} = 32,25$ l/min

7 End-stop synchronisation of parallel-connected cylinders

When one of the two cylinders reaches its end-stop, the flow to the other cylinder drops to approx. 5-10% of its nominal rate. This leakage flow enables the second cylinder, which has not yet reached its final position, to slowly resynchronise itself. To enable full-speed resynchronisation of the lagging cylinder, each actuator line from the flow divider must be equipped with a pressure relief valve.

8 Installation attitude and mounting

To prevent the weight of the spool causing division inaccuracies, the valve must be installed so that the spool axis is horizontal. When mounting the valve, make sure that the body is not subjected to any distorting forces. Do not use tapered-thread pipe fittings.

9 Fluid cleanliness

MTDA flow divider require fluid with a minimum cleanliness level of NAS 1638, Class 9 or ISO 4406, code 20/18/15.

HLP hydraulic oils to DIN 51524, Part 2, can be used without any special restriction as long as they remain within the specified temperature and viscosity ranges. HFC fire-resistant fluids to DIN 51502 can be used. Note that all fire-resistant fluids require special versions of the valves and must be approved by Bucher Hydraulics. We recommend the use of fluids that contain anti-wear additives for mixed-friction operating conditions. Fluids without appropriate additives can reduce the service life of pumps and motors. The user is responsible for maintaining, and regularly checking, the fluid quality. Bucher Hydraulics recommends a load capacity of $\geq 30 \text{ N/mm}^2$ to Brugger DIN 51347-2.

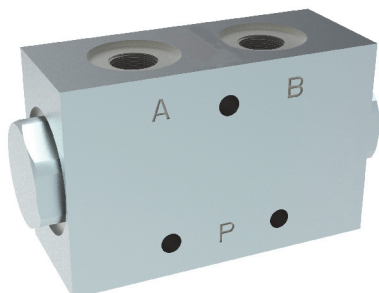
10 Fluid cleanliness

Cleanliness class (RK) onto ISO 4406 and NAS 1638

Code ISO 4406	Number of particles / 100 ml			
	$\leq 4 \mu\text{m}$	$\leq 6 \mu\text{m}$	$\leq 14 \mu\text{m}$	NAS 1638
23/21/18	8000000	2000000	250000	12
22/20/18	4000000	1000000	250000	-
22/20/17	4000000	1000000	130000	11
22/20/16	4000000	1000000	64000	-
21/19/16	2000000	500000	64000	10
20/18/15	1000000	250000	32000	9
19/17/14	500000	130000	16000	8
18/16/13	250000	64000	8000	7
17/15/12	130000	32000	4000	6
16/14/12	64000	16000	4000	-
16/14/11	64000	16000	2000	5
15/13/10	32000	8000	1000	4
14/12/9	16000	4000	500	3
13/11/8	8000	2000	250	2

Flow divider with very high division accuracy

Series MTDA08HG



- division accuracy 1,5% based on operating flow range
- standard-supply zinc-nickel coating
- robust, simple and reliable
- easy to service
- flows can be split or merged with accuracy (divide/combine functions).

1 Description

1.1 General

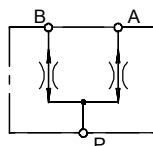
MTDA08HG is a flow divider with very high division accuracy and a large operating flow range. With this new valve, division accuracy is specified in relation to the supply flow rate and not, as is usual in the market, to the nominal flow rate (see chart).

Another notable feature is the standard-supply zinc-nickel coating, with a corrosion-resistance of over 720 hours of salt-spray test, DIN EN ISO 9227. They divide a flow into two usually equal parts (1:1). When flow passes through valve in the opposite direction, the two part-flows are combined into one single flow (added). The dividing and combining functions are largely independent of the pressures of the two divided flows and of the fluid viscosity.

1.2 Application examples

- Work access platforms
- Lifting platform
- Car transporter
- Hydraulic platform
- Hydraulic ramp
- Hydraulic door drive

2 Symbols



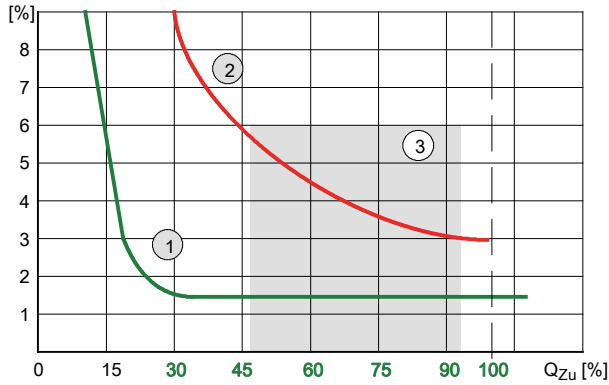
3 Technical data

General characteristics	Unit	Description, value
Maximum pressure	bar	250 continuous, 315 peak pressure
Control flow range	l/min	16 , 25 , 32 und 50
Division accuracy in control flow range	%	1,5 with maximum loading difference $P_A:P_B = 200$ bar and spool axis is horizontal
Oil temperature range	°C	-20 ... +80
Viscosity range	mm ² /s	10 ... 250
Oil cleanliness		minimum class 9 of NAS 2638 or class 19/17/14 of ISO 4406
Seals		(NBR) Nitrile Butadiene Rubber
Weight	kg	ca. 2,2
Port threads	A, B, P	G 3/8", DIN EN ISO 9974-1
Salt spray test		Corrosion resistant >720 hours

4 Characteristic curves

4.1 Division accuracy [%]

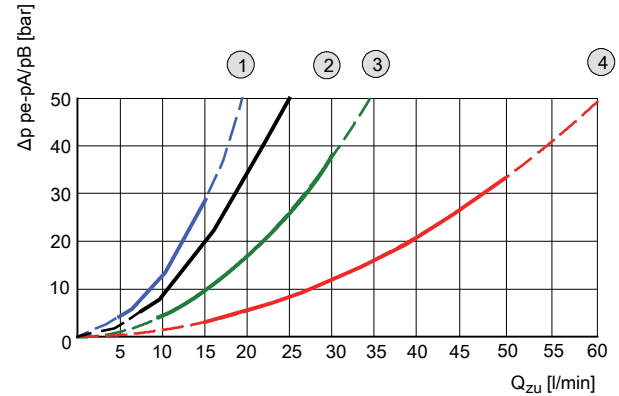
with oil viscosity of 35 mm²/s



1	MTDA08HG (high-precision) based on operating flow range
2	MTDA08 standard based on operating flow range
3	MTDA08 standard +/- 3 % based on nominal flow range

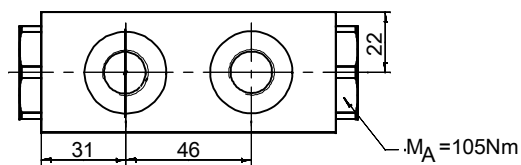
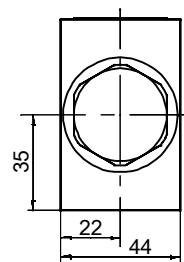
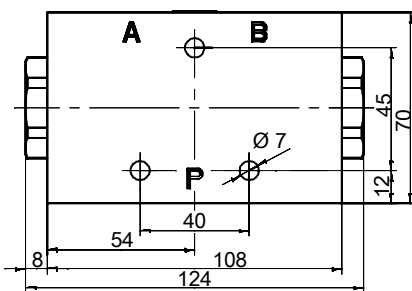
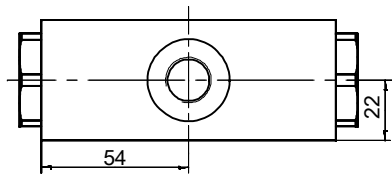
4.2 Pressure drop characteristics (Δ)

Pressure drop v. flow rate with oil viscosity of 35 mm²/s



1	Control flow range = 5 - 15 l/min
2	Control flow range = 7,5 - 25 l/min
3	Control flow range = 10 - 32 l/min
4	Control flow range = 15 - 50 l/min

5 Dimensions



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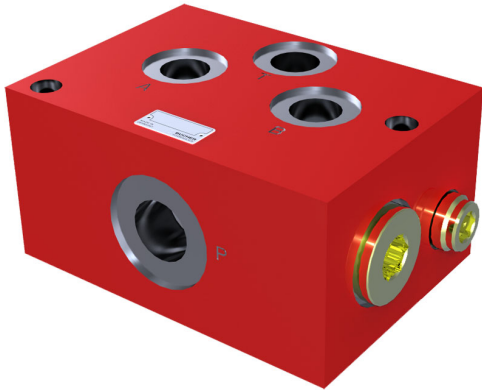
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Classification: 430.310.335.310.

High Pressure Flow Divider

420 bar, 250 l/min
Series MTDA..HD



- these valves do not require maintenance.
- flows can be split or merged with accuracy (divide/combine functions).
- Functions:
 - decompression orifice
 - make-up valves
 - Crossline relief valve

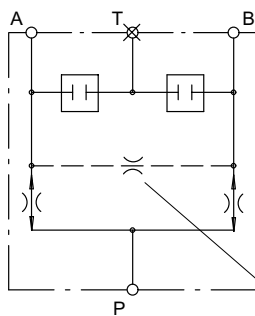
1 Description

Series MTDA..HD units are flow dividing valves that operate automatically. They are intended for use with hydraulic fluids. They divide a flow into two parts. When flow passes through a valve in the opposite direction, the two part-flows are combined into one single flow (added). The dividing and combining functions are largely independent of the pressures of the two divided flows and of the fluid viscosity.

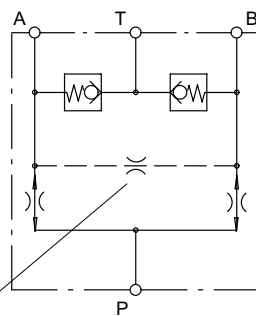
In order for the valve to work properly, a continuous flow is required at all ports. For example, if one actuator is no longer able to move, then the other part-flow will also be restricted. If the two actuators served by the flow divider operate at different pressures, then the pressure of the total flow entering the valve will correspond to the higher of the two actuator pressures.

2 Symbols

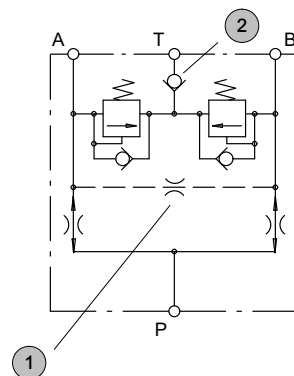
Standard Function "H"



Function "N" with anti-cavitation check valve



Funktion "P" with crossline relief valve



1 Decompression orifice (This option must be commanded in a separated text, see 6)

2 Check valves in T (only in connection with "P")

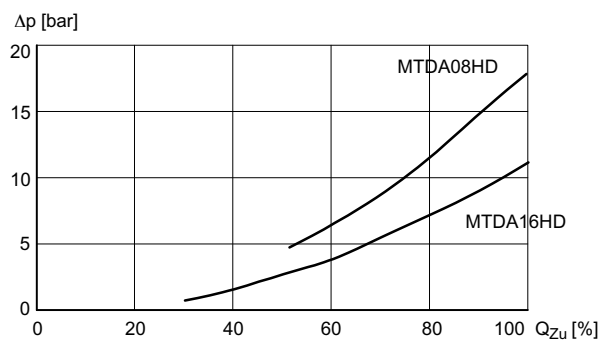
3 Technical data

General characteristics	Unit	Description, value
Maximum operating pressure	bar	420
Oil temperature range	°C	-20 ... +80
Viscosity range	mm ² /s	10 ... 300
Maximum admissible level of contamination of the hydraulic fluid		ISO 4406 class 20/18/15 (NAS 1638 class 9), achievable with a filter rating of $\beta_{10} \geq 75$
Nitrile seals		NBR

4 Characteristic curves

4.1 Pressure drop characteristics

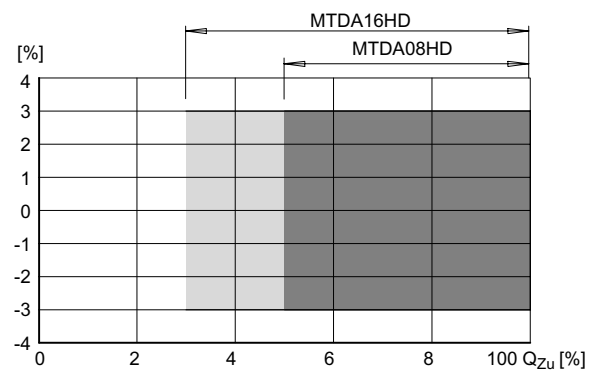
Pressure drop v. flow rate with oil viscosity of 35 mm²/s
($Q_{Zu} 100\% = Q_{Nenn}$)



4.2 Division accuracy

(without Decompression orifice)

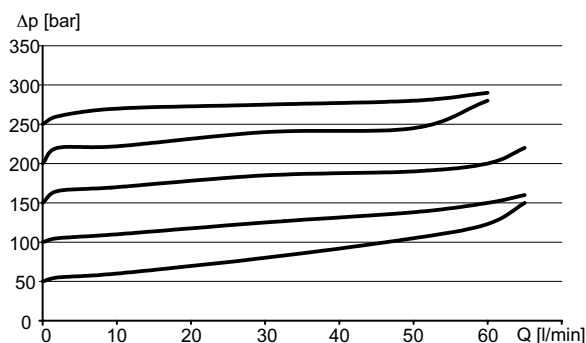
Division error v. flow rate with oil viscosity of 35 mm²/s
($Q_{Zu} 100\% = Q_{Nenn}$)



IMPORTANT : Division accuracy $\pm 3\%$ of the maximal flow rate, based on nominal volume flow range of the respective flow divider (see example abs. 6.1). For higher division accuracy contact Bucher Hydraulics.

4.2.1 Anti-shock valve

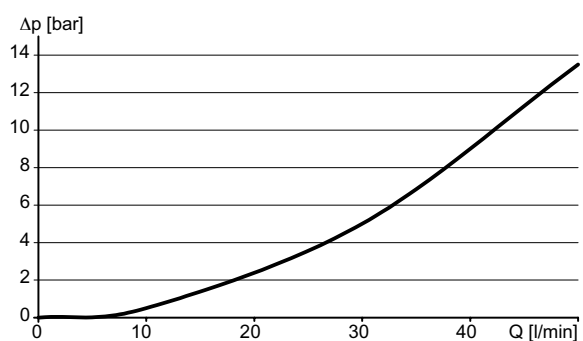
Q [l/min] = flow rate from actuator to tank
 Δp [bar] = pressure difference from actuator to tank



For flow rates < 60 l/min contact Bucher Hydraulics

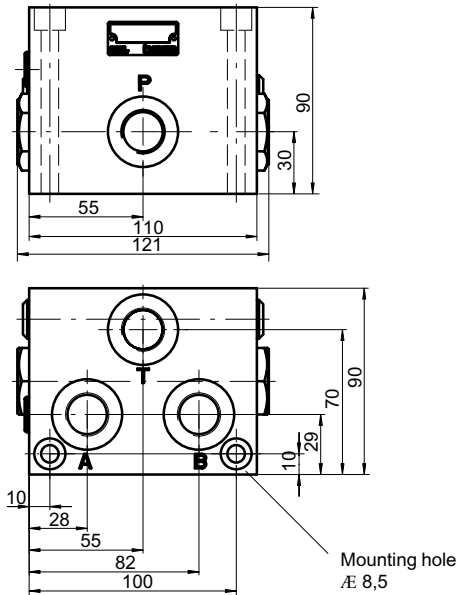
4.2.2 Make-up valve

Q [l/min] = flow rate from tank to actuator
 Δp [bar] = pressure difference from tank to actuator

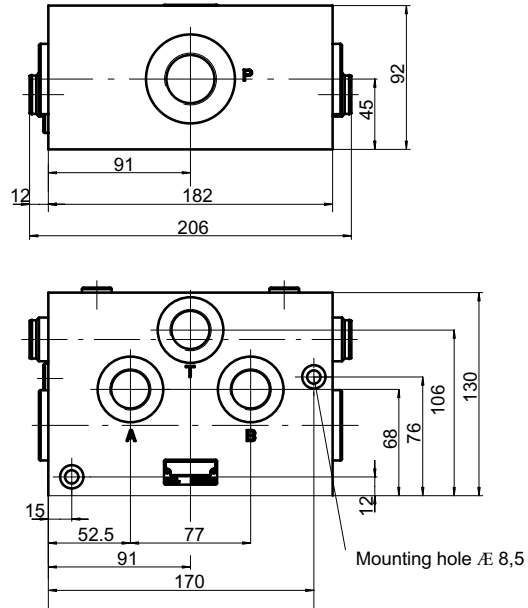


5 Dimensions

5.1 MTD A08HD



5.2 MTD A16HD



6 Ordering code

M T D A [] H D - [] G [] - [] P=²D=³

Flow divider

Bi-directional

Threaded ports

Nominal size 08 or 16

High pressure

Flow range inlet flow (l/min):

NG 08		NG 16	
004 = 2-4	025 = 12-25	100 = 35-100	
006 = 3-6	032 = 16-32	120 = 40-120	
008 = 4-8	050 = 25-50	160 = 50-160	
012 = 6-12	075 = 37-75	200 = 60-200	
016 = 8-16	100 = 50-100	250 = 75-250	

Port threads

Size 08: G 1/2" = G 12
Size 16: A,B,T = G 3/4" / P = G 1" = G 34

Options Check valve in the T line = R¹
without = *

Functions Standard = H
with make-up check valve = N
with crossline relief valve = P²

1) Only in connection with "P" possible

2) Pressure settings in bar available for the anti-shock valve (measured at 10 l/min test flow) 25, 32, 40, 50, 63, 80, 100, 125, 140, 160, 175, 190, 210, 230, 250, 280, 300, 330, 350, 380 (for other pressures, consult BUCHER)

3) State the diameter of the balancing orifice, if required (e.g. E 0.6 - D = 06)

6.1 Example for division accuracy

Flow range: To 60 l/min, required division of
 $Q_A/Q_B = 30$ l/min (division 1 : 1)

Flow divider: **MTDA08-075G12*-P**
 flow range 37...75 l/min
 max. flow rate 75 l/min

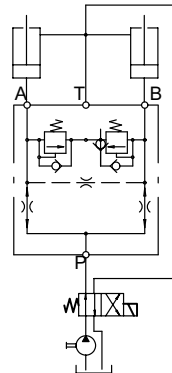
max. allowable deviation = $75 \text{ l/min} \times \pm 3\% = \pm 2,25 \text{ l/min}$

Resulting part- flow rate at Q_{Zu} 60 l/min:
 Port A - $Q_{min} = 27,75 \text{ l/min} / Q_{max} = 32,25$
 Port B - $Q_{min} = 27,75 \text{ l/min} / Q_{max} = 32,25$

7 Installation attitude and mounting

To prevent the weight of the spool causing division inaccuracies, the valve must be installed so that the spool axis is horizontal. When mounting the valve, make sure that the body is not subjected to any distorting forces. Do not use tapered-thread pipe fittings.

8 Example of use



9 Fluid

MTDA..HD flow divider require fluid with a minimum cleanliness level of NAS 1638, Class 9 or ISO 4406, code 20/18/15.

HLP hydraulic oils to DIN 51524, Part 2, can be used without any special restriction as long as they remain within the specified temperature and viscosity ranges. HFC fire-resistant fluids to DIN 51502 can be used. Note that all fire-resistant fluids require special versions of the valves and must be approved by Bucher Hydraulics. We recommend the use of fluids that contain anti-wear additives for mixed-friction operating conditions. Fluids without appropriate additives can reduce the service life of pumps and motors. The user is responsible for maintaining, and regularly checking, the fluid quality. Bucher Hydraulics recommends a load capacity of $\geq 30 \text{ N/mm}^2$ to Brugger DIN 51347-2.

10 Fluid cleanliness class

Cleanliness class (RK) onto ISO 4406 and NAS 1638

Code ISO 4406	Number of particles / 100 ml			NAS 1638
	$\leq 4 \mu\text{m}$	$\leq 6 \mu\text{m}$	$\leq 14 \mu\text{m}$	
23/21/18	8000000	2000000	250000	12
22/20/18	4000000	1000000	250000	-
22/20/17	4000000	1000000	130000	11
22/20/16	4000000	1000000	64000	-
21/19/16	2000000	500000	64000	10
20/18/15	1000000	250000	32000	9
19/17/14	500000	130000	16000	8
18/16/13	250000	64000	8000	7
17/15/12	130000	32000	4000	6
16/14/12	64000	16000	4000	-
16/14/11	64000	16000	2000	5
15/13/10	32000	8000	1000	4
14/12/9	16000	4000	500	3
13/11/8	8000	2000	250	2

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Classification: 430.310.335.375.000

Internal Gear Flow Divider

Series QXT



- extremely high division accuracy
- exceptionally quiet operation
- negligible pressure pulsations
- long service life
- high efficiency, since operating principle ensures there are no throttling losses
- wide range of outlet flows are available
- suitable for special fluids such as HFC, environmentally friendly and low viscosity fluids

1 General

1.1 Product description

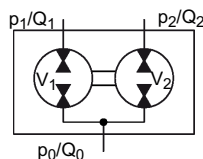
Series QXT flow dividers are internal gear units that can divide a flow into as many as four portions. The division ratios are constant and are unaffected by the loads at the actuators. They can be used, for example, to provide synchronised movement of unequally loaded cylinders. Several hydraulic motors can be driven at the same speed, irrespective of their external loads. Since they operate on the principle of the rotating internal gear set, these flow dividers work without any throttling losses, which is in strong contrast to spool-type flow dividers. The QXT flow divider can also

be used to produce pressure intensification i.e. the outlet pressure from the flow divider is higher than its inlet pressure. This takes place at high efficiency, since the operating principle ensures that the only losses that can possibly occur are proportional to the pressure difference across the unit. The unit is based on the well-known QX internal gear pump, which is distinguished by its very low noise levels and almost imperceptible pressure pulsations. The large number of closely spaced sizes ensures that the right size is always available for every application.

1.2 Application examples

- Air conditioning Systems
- Track laying machinery
- Waste compactors
- Hydraulic presses

2 Symbol



3 Technical data

Characteristics	Unit	Description, value
Installation attitude		unrestricted
Hydraulic fluid		HLP mineral oils to DIN 51524, Part 2 HFB, HFD and HFC fluids to VDMA 24317 other fluids - contact Bucher Hydraulics
Max admissible level of contamination of the hydraulic fluid		ISO 4406 class 20/18/15, or NAS 1638 class 9

Operating viscosity Starting viscosity	mm ² /s	10 ... 100 10 ... 300 (higher values, contact Bucher Hydraulics)
Hydraulic fluid temperature	°C	HLP mineral oil - 80 max. HFB, HFD and HFC 50 max.

3.1 Flow dividers with outlet flows of equal sizes

These operating data are valid for mineral oils with 42 mm²/s.

Please contact Bucher if you require unequal outlet flows.

Type	Outlet displacement cm ³ /U	Cont./ Interm. pressure ¹⁾ bar	Speed n _{max} / n _{min} min ⁻¹	Maximum inlet flow Q _{0 max}		
				2 outlet flows l/min	3 outlet flows ²⁾ l/min	4 outlet flows ²⁾ l/min
QXT22-005/22-005	5	250/320	6300/1250	63	95	125
QXT22-006/22-006	6			80	120	160
QXT22-008/22-008	8			100	150	200
QXT32-012/32-012	12	250/320	5000/1000	120	180	240
QXT32-016/32-016	16			160	240	320
QXT42-025/42-025	25	250/320	4000/800	200	300	400
QXT42-032/42-025	32			250	380	500
QXT52-050/52-050	50	250/320	3200/630	320	480	640
QXT52-063/52-063	63			400	600	800
QXT62-100/62-100	100	250/320	2500/500	500	750	1000
QXT62-125/62-125	125			630	950	1260
QXT82-200/82-200	200	250/320	2000/400	800	1200	1600
QXT82-250/82-250	250			1000	1500	2000

1) Intermittent for max. 20 sec/min but not than 10% of the duty cycle

2) for 3 and 4 outlet flow please contact Bucher Hydraulics

3.2 Choose the optimal flow divider

These operating data are valid for mineral oils with 42 mm²/s.

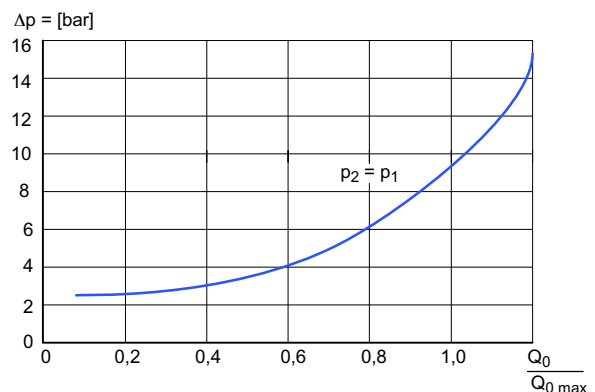
For the highest division accuracy as well as the lowest cost, choose the smallest possible flow divider running near its maximum speed. The speed n in rev/min is calculated from:

$$n = \frac{Q_0 \times 10^3}{V_1 + V_2 + V_3 + \dots}$$

where Q₀ = inlet flow rate in l/min and V₁ = outlet displacement in cm³/rev. The minimum permissible inlet flow rate is calculated from:

$$Q_{0 \min} = \frac{n_{\min}}{n_{\max}} \times Q_{0 \max}$$

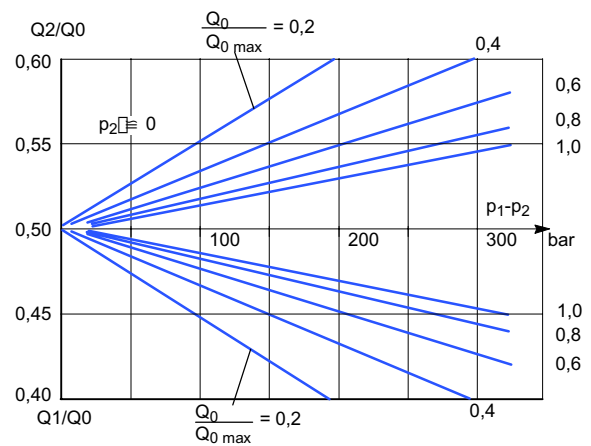
In the case of the flow dividers with unequal outlet displacements, use the largest displacement for determining n_{max}, the smallest for n_{min}. Since rotary flow dividers are also pressure intensifiers, each outlet circuit must be provided with a pressure relief valve. Bucher Hydraulics series VT relief valves mount directly on the flow divider and are therefore particularly suitable (please request the data sheet 100-D-402850).



4 Performance curves

These operating data are valid for mineral oils with 42 mm²/s.

Tests carried out on a QXT flow divider, type 32-016/32-016, produced the results shown below. For the same speed, larger flow dividers have a better accuracy while smaller ones display a bigger difference between the two outlet flows. The division accuracy of the outlet flows Q1 and Q2 depends mainly on the pressure difference between the two outlet lines and the ratio $Q_0 / Q_{0 \max}$. The pressure drop across the flow divider is dependent on $Q_0 / Q_{0 \max}$. Using the curves, the accuracy of flow division and the pressure drop can be optimised.



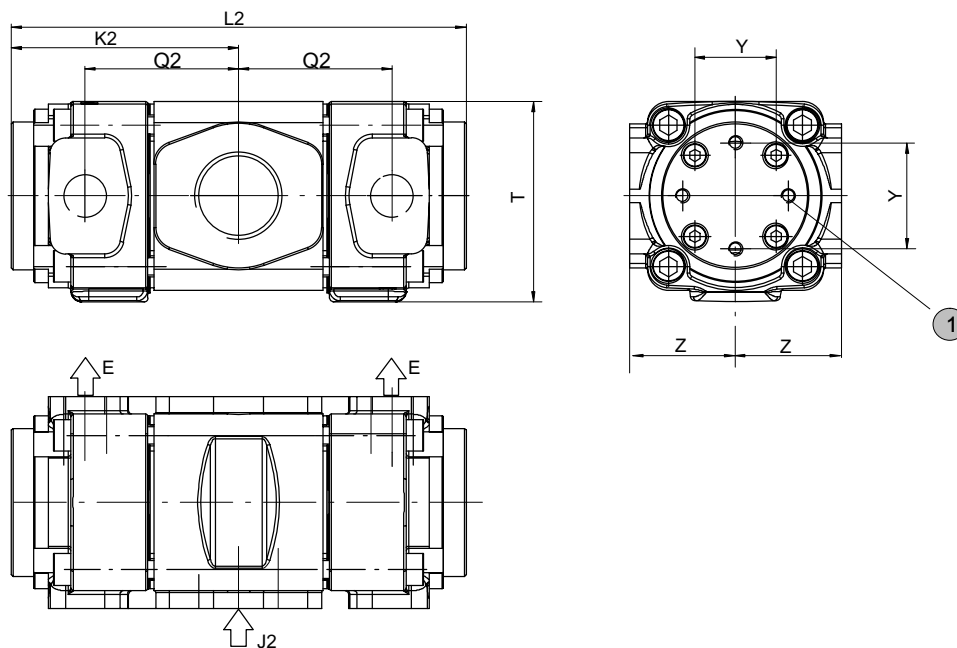
5 Dimensions

5.1 For flow divider with 2 displacements

Frame size	2	3	4	5	6	8
J2	G 1 1/4" thread	G 1 1/2" thread	2" SAE J518 ¹⁾	2" SAE J518 ¹⁾	2" SAE J518 ¹⁾	G 2 1/2" thread
E	G 1/2" thread	G 3/4" thread	1" SAE J518 ¹⁾	1 1/4" SAE J518 ¹⁾	1 1/2" SAE J518 ¹⁾	2" SAE J518 ¹⁾
G	M8x12	M8x12	M10x16	M10x20	M16x28	M20x30
K2	102	129	159,5	190	230,5	282,5
L2	204	258	319	380	461	565
Z	50	60	62,5	78	97,5	125
Q2	67	87	110,5	127	149	178,5
Y	55	60	75	90	112	140
T	85	107	133	177	220	275

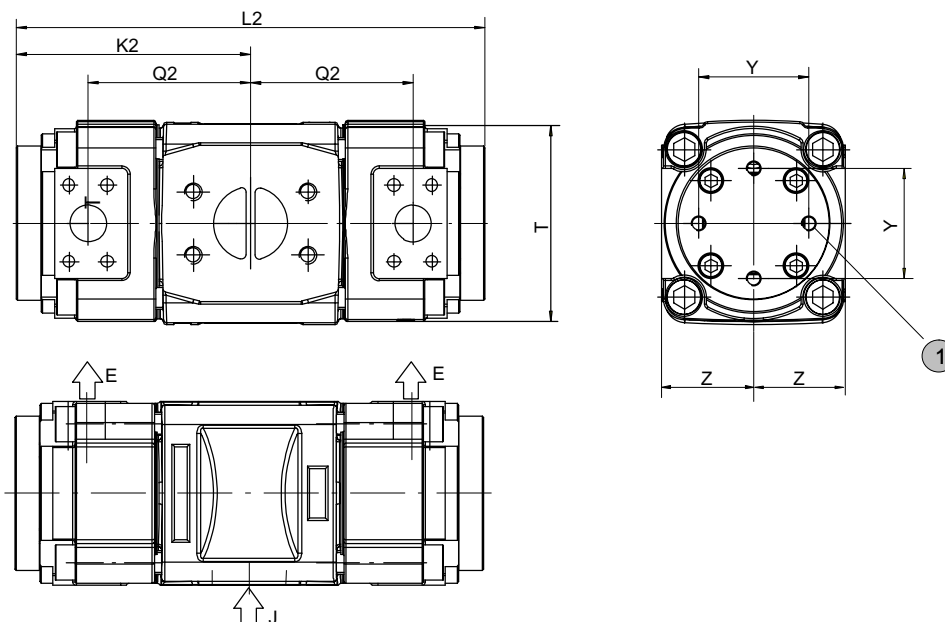
1) for SAE J518 code 61 / ISO 6162-1 pipe flange (see section 7.2)

5.2 Frame size 2 - 3



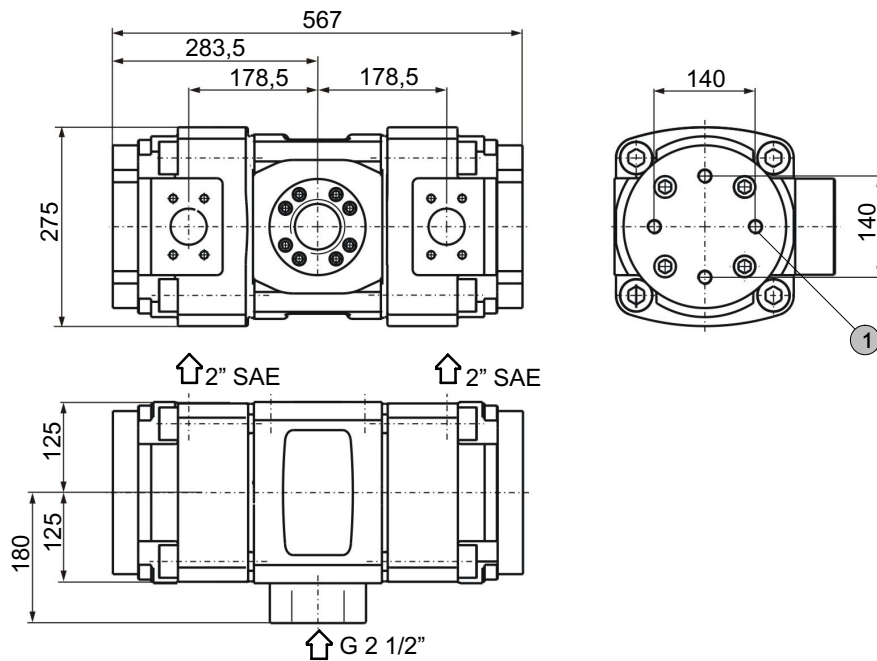
1 Mounting threads
4 x dimensions 'G' - both ends

5.3 Frame size 4 - 6



1 Mounting threads
4 x dimensions 'G' - both ends

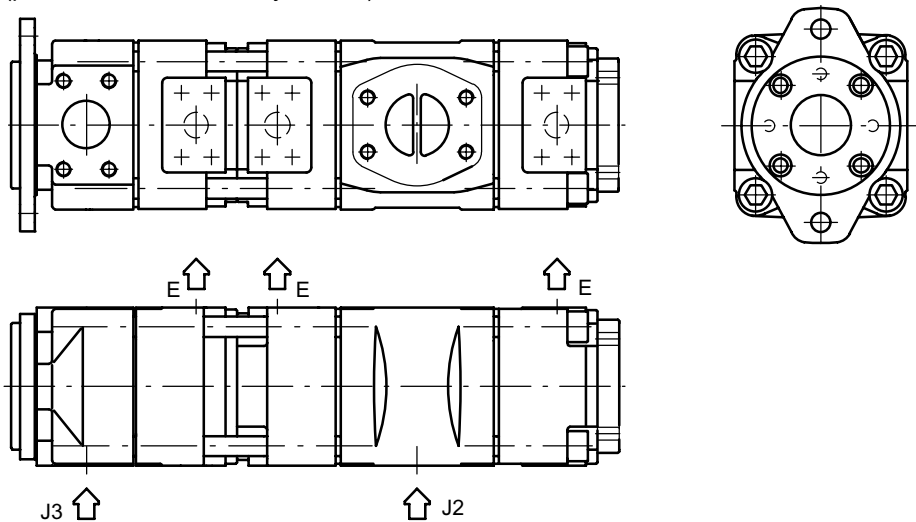
5.4 Frame size 8



1 Mounting threads
4 x dimensions 'G' - both ends

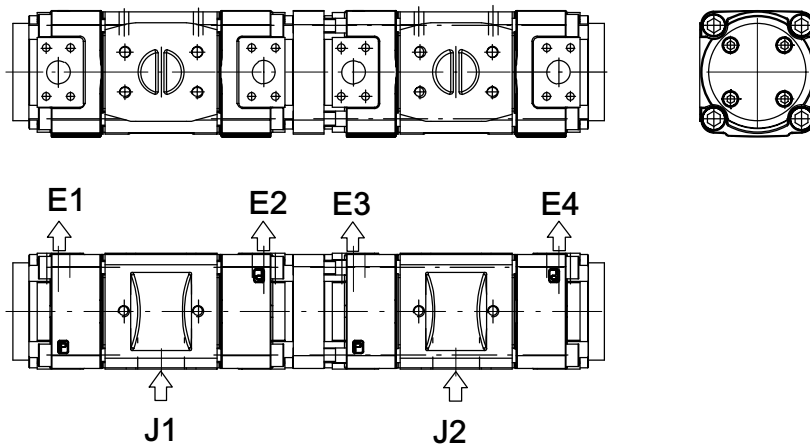
5.5 Flow divider with 3 displacements

(please contact Bucher Hydraulics)



5.6 Flow divider with 4 displacements

(please contact Bucher Hydraulics)



6 Ordering code for 2 displacements

		Q	X	T	3	2	-	0	1	2	/	3	2	-	0	1	2	/	
Series	QXT																		
Frame size	2 / 3 / 4 / 5 / 6 / 8																		
Pressure range 2	2																		
Outlet displacement	005 - 250 (see chapter 3.1)																		
Frame size	2 / 3 / 4 / 5 / 6 / 8																		
Pressure range 2	2																		
Outlet displacement	005 - 250 (see chapter 3.1)																		
Special features	(see section 6.2)																		

6.1 Ordering example

For dividers with 3 outlet flows:
QXT22-005 / 22-005 / 22-005

For dividers with 4 outlet flows:
QXT62-100 / 62-100 / 62-100 / 62-100

Flow divider combinations must contain the same frame sizes, pressure ranges and outlet flows.

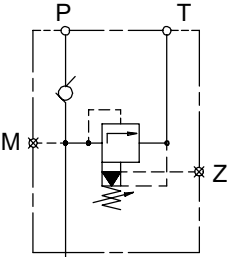
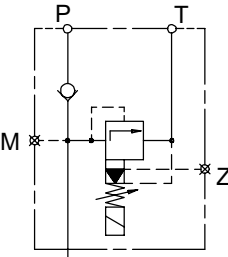
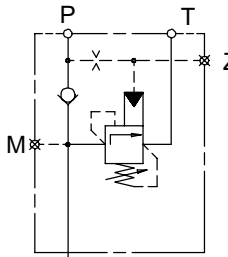
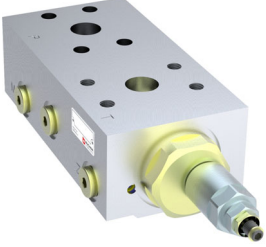

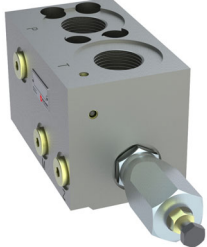
If 3, 4 or unequal flows are required, please contact Bucher Hydraulics

6.2 Special features

- O = without priming
- 09 = Viton seals and without priming
- 117 = port at outlet (E) in SAE J518 code 61 / ISO 61621 at assembly group 2+3

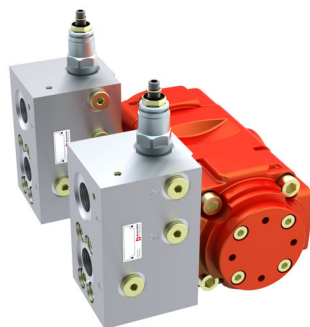
7 Accessories

7.1 Bolt-on valves - SAE J518 code 61 / ISO 6162-1 pattern

Pressure relief valve A $\frac{S}{G}$ DF	Pressure relief valve solenoid control A $\frac{S}{G}$ DA	Accumulator charging valve AGSF
		
		
<p>Technical data sheet 100-P-000123</p>	<p>Technical data sheet 100-P-000119</p>	<p>Technical data sheet 100-P-0000124</p>

7.1.1 Example for Bolt-on valves, mounted on QXT flow divider

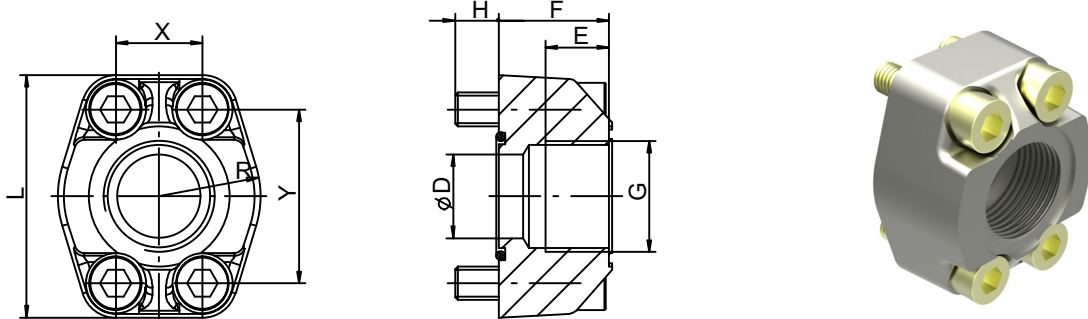
Bolt-on valve with threaded ports
QXT32 + AGDF



IMPORTANT: For detailed informations on Bolt-on valves see www.bucherhydraulics.com

7.2 Pipe flange - high pressure type

- up to 420 bar
- SAE J518 code 61 / ISO 6162-1 pattern



Threaded pipe flanges are spot-faced for pipe fittings.

Material: ST37 / For Viton seals, contact Bucher Hydraulics

Ordering-number	Ordering code	Size	D \emptyset	E	F	H	L	R	X	Y	Viton seal 90 Shore 'A'	Retaining screws DIN912-12.9 M [Nm]	
037000	RF 01-R08	G 1/2"	12,5	16	27	13	54	23	17,5	38	20,24x2,62	M8x30	30
037010	RF 02-R10	G 3/4"	20	18	30	12	65	26	22,2	47,6	26,65x2,62	M10x30	60
037020	RF 03-R11	G 1"	25	20	34	13	70	29	26,2	52,4	32,99x2,62	M10x35	60
037030	RF 04-R12	G 1 1/4"	32	22	38	14	80	36	30,2	58,6	40,86x3,53	M10x40	60
037040	RF 05-R13	G 1 1/2"	38	24	41	19	94	41	35,7	70	44,04x3,53	M12x45	120
037050	RF 06-R14	G 2"	50	26	45	20	102	48	42,9	77,8	59,92x3,53	M12x50	120

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Classification: 420.245.370.